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Continuities and Discontinuities Between Pre- and Post-Independence Indian Politics	Paul R. Brass	1
Centre-State Financial Relations in India: 1870-1990	M.M. Sury	15
Adjustment and Human Development in India	Martin Ravallion and K. Subbarao	55
Evolution of Agrarian Relations in India	H.R. Sharma	80
Documentation		
Perspective Planning for Transport Development: Part II Transport Sector	Planning Commission, Government of India	107
Housing Policy		146
Review Article		
Savings of The Private Corporate Sector	Ajit Karnik	161
Book Reviews		167
Annotated Index of Books and Articles		193
Books Received		197
Editorial Correspondence		199

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CONTINUITIES AND DISCONTINUITIES BETWEEN PRE- AND POST-INDEPENDENCE INDIAN POLITICS

Paul R. Brass

Indian politics before and since Independence have been characterised by persistent strains between centralising leaders and authorities and local political practices, which have manifested themselves in the political order, in social conflicts, and in the economy. The leaders of the country retained at Independence many features of the authoritarian bureaucratic colonial legacy and set out deliberately to provide a Constitution for a strong, centralised state. These colonial legacies and indigenous desires to emulate Western strong state models were imposed upon the world's most culturally heterogeneous society and one in which political practices and values remained heavily influenced by local economic factors and social forces. The inevitable contradictions which have become more intense in recent years were already evident at Independence in the disjunctions between political rhetoric and reality, between leaders seeking to mobilize the masses of the people for broad political goals and local politicians seeking local power and distributing patronage, and between central structures of authority and power and regional and local political, social, economic, and cultural forces.

India arrived at Independence after a long struggle and with a multiplicity of heritages and legacies. Among the legacies were the long experience of British rule, extending over two centuries, and the various institutions, ideas, and practices which came along with it. A second legacy was that provided by the shared experience of those Indians who participated in or identified with the nationalist movement and its great leaders. A third was the existing social order, the social structure, and social conflicts which surrounded and influenced political movements, ideas, and practices. Finally, there was the great body of traditions and cultural practices which preceded British rule in a civilization of great depth, complexity, and diversity.

THE CONSTITUTION AND THE COLONIAL LEGACY

In some ways, it is possible to view Independence and the adoption of a new Constitution as another stage in the evolution of India towards representative government in a process that dates back to the Indian Councils Act of 1861 and continues through the Morley-Minto Reforms of 1909, the Montagu-Chelmsford Reforms of 1919, and the Government of India Act of 1935. At each of these reforms, the participation of Indians in the central and state legislatures and in the executive councils was increased and the franchise was extended to ever larger numbers of people. It has been noted that there was a considerable degree of continuity between the Government of India Act and the Constitution of India. The features of continuity included the adoption of a federal system of government with three legislative lists of powers to be exercised exclusively by the Union, exclusively by the states, or concurrently, and a combination of a considerable degree of provincial autonomy with extensive powers left to the Centre,[1] including emergency powers which made it possible to convert the federal system into a unitary one. The Constitution of independent India is federal, but contains strong unitary features, including a strong central government which retains not only the residuary powers of the Union but extensive emergency powers as well. The states are normally supposed to function autonomously, but the Centre retains the ultimate power to control, even take over the direct administration of the states, under certain conditions.

In several respects, however, the Constitution of India makes a sharp break with the British colonial past, though not with British political practices. It introduced universal adult suffrage and adopted in total the Westminister form of parliamentary government rather than the mixed parliamentary-bureaucratic authoritarian system which actually existed in India. It also contains some unique features that reflect a desire to depart from strict British parliamentary practices and to introduce into the charter of the country a programme of social and economic reform. Most notable in this respect is the presence in the Constitution of a list of both Fundamental Rights

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of the People and Directive Principles of State Policy, a combination of protections for the people against the encroachments of state authority with directives to the state to introduce specified reforms to make those rights effective. The simultaneous presence in the Constitution of these two sets of principles and guidelines reflected some of the tensions which existed in the minds of the leaders of the country at Independence. While they respected the British-American traditions of parliamentary practice and personal liberty, some, particularly Nehru, also were influenced by the Soviet model and the Socialist traditions of Western Europe and Britain as well. They wished to extend the liberties of the people of India, but they wished also to bring about rapid social and economic change and they wanted no obstacles to stand in the way of their so doing.

There was also the idea that fundamental rights were not enough, would not be meaningful in a land where the mass of the people were extremely poor, illiterate, tied to traditions, and perceived as exploited by merchants, money lenders, and landlords. It was feared that such rights might be used to protect the exploiters rather than the exploited. In a society based on hierarchy, caste inequality, and blatant discrimination, equality of opportunity such as existed in Britain and the United States would not be enough to provide the means for enhancing the well-being of the poor. Instead, special measures would be required, such as reservations of places in representative institutions, government agencies, and public institutions for backward and disadvantaged classes and groups. There was a desire also not merely to protect the rights of the people, but to eliminate certain features of social practice, such as untouchability and *begar* or forced labour, which were explicitly abolished in the Constitution. And, finally, there was a desire to limit the role of private enterprise in India and a feeling that the protection of property provided in the Constitution might prevent the Indian state from attaining goals of economic justice, which some thought could be achieved only through the establishment of social ownership of the means of production, then identified with state ownership. So, the Constitution recognized the right to hold property as a fundamental right, but also included directive principles of policy which stated that the material resources of the country must be distributed and operated in such a way as to promote the common good and avoid excessive concentration of wealth.

Those who argue that India's Independence should not be seen as marking a great break with the past also point to the preservation of such characteristic features of British autocratic rule in India as the Indian Civil Service (ICS), renamed as the Indian Administrative Service (IAS) at Independence. The small, enormously powerful, elite cadre of ICS officers was seen as the "steel frame" that had held the British Empire in India together. Authority and responsibility were concentrated in their hands in the districts, where they acted simultaneously as heads of the administration and of the judicial institutions, maintaining law and order and collecting the revenue. Yet, the leaders of independent India felt the need for maintaining that "steel frame" to help preserve order in the country, which was undergoing such turmoil at Independence. It was not long, however, before a contradiction was perceived between the predominant functions of the old ICS and the developmental goals of the independent Indian state, which required a different type of administrative structure. Since Independence, there have been numerous attempts to devise structures of local self-government, administration, and development institutions more suited for these development goals, which would also combine popular participation at the local level without undermining the older structures of state authority which the leadership of the country was unwilling to give up.

At Independence, therefore, the leaders of the country quite self-consciously maintained many features of the colonial legacy. They also adopted some new features derived from the political practices of Great Britain and the United States. However, most of the specific features of the Constitution of India and the administrative structure retained or adopted at Independence represented borrowings from abroad, which had to be adapted to the social structure, traditions, and practices of an entirely different society.

SOCIAL STRUCTURE: THE COMMUNAL AND CASTE BASES OF INDIAN POLITICS

It was commonly argued by the British rulers of India that parliamentary democracy was unsuited to a society intensely divided into religious and other communal groupings whose social structure also was imbued with an ideology of hierarchy rather than equality. The rise of the Muslim League and the Pakistan movement, which led to the bitter catastrophe of partition of the sub-continent was seen by such persons as proof of the inherent incompatibility of Western parliamentary institutions and Indian communal realities. Indian nationalists, however, argued strongly against such ideas and insisted that Hindu-Muslim communalism itself was a British creation and that, left to themselves, Hindus and Muslims would work together in a secular political order and would divide internally on economic and class, rather than religious lines. The British, operating on a set of assumptions that treated Hindus and Muslims as distinct peoples, introduced mechanisms, notably separate electorates, which served to keep them apart. At Independence, however, the framers of the Constitution eliminated separate electorates and established only general electorates in which members of all castes, religions, and communities would vote.

It was also argued that caste Hindus and untouchable and other low castes could hardly be expected to work together as equals in a democratic political order, that the former would maintain the rigidity of traditional hierarchies and caste discriminations which would prevent the poor and disadvantaged low castes from participating effectively in politics. Leaders of the Indian National Congress themselves were painfully aware that they had been unable before Independence to recruit successfully most low caste and disadvantaged groups. So, at Independence, though they resisted any efforts to create separate electorates for the low castes, the Constitution and government policies instituted mechanisms and procedures to ensure their full participation as equal citizens in the new order. These mechanisms and procedures included reservation of seats in the legislatures and other bodies, the maintenance of a list of low caste groups on a schedule (hence the name Scheduled Castes) entitling them to special privileges and preferential policies of all sorts, the abolition of untouchability, and the like.

The division between caste Hindus and untouchables was not the only kind of problem posed by the caste order for the effective functioning of parliamentary institutions in post-Independence India. In most villages, one or two large elite castes controlled most of the land and other resources, constituting what anthropologists call "dominant castes." Divisions among the elite and middle status land-controlling castes also existed at Independence in large parts of India. In some parts, particularly Tamil Nadu and Maharashtra, non-Brahman movements had been launched even before Independence to displace the dominant Brahman castes from their disproportionate control over jobs in the public services and other advantages in society. Backward caste leaders had argued that their place was insecure under a parliamentary system which the elite castes could turn to their advantage and that they too, like the Scheduled Castes, required special protection. Since Independence, the spread of conflict between the elite and backward caste groups has become a major source of social tension in many states and has precipitated considerable violence in some states such as Bihar and Gujarat.

These issues of Hindu-Muslim communal relations, of the integration of the low castes as effective participants in a democratic political order, and of caste conflict between the backward castes and the elite castes have persisted throughout the post-Independence period up to the present and have posed recurring challenges to the maintenance of an integrated society, an equalitarian politics, and non-violent mechanisms of conflict resolution.

IDEAS DERIVING FROM THE NATIONALIST MOVEMENT

Three-quarters of a century of thought and struggle over defining the Indian nation, over freeing the country from alien occupation, and over the desirable shape of the social and economic order in a future independent India had provided the nationalist leadership at Independence with a set of ideas and goals that

helped to structure their responses to the problems of governing the newly independent country. At the top of all their goals, the *sine qua non* for everything else was an abiding faith in and determination to preserve the national unity and integrity of the country against all potential internal and external threats to it. The very fact that this first priority, the centre of the dreams of the Congress nationalists, had to be sacrificed by agreeing to the partitioning of the country as a price for Independence, reenforced the determination of the leaders never to make such a sacrifice again.

Hence, since Independence, two strict rules have been followed in all dealings with dissident domestic ethnic, religious, linguistic, and cultural group demands. The first is that no secessionist movement will be entertained and that any group which takes up a secessionist stance will, while it is weak, be ignored and treated as illegitimate, but, should it develop significant strength, be smashed, with armed force if necessary. All secessionist demands in post-Independence India which acquired any significant strength have been treated in this way, especially in the northeastern part of the country and lately in the Punjab and Kashmir. Secessionist demands have also been headed off from time to time in other parts of India, for example in Tamil Nadu in the 1950s, because of the clear understanding that force would be used against the groups who promoted such demands if they persisted.

The second rule has been a prohibition against the concession of demands for any form of political recognition of a religious community. Muslims, Sikhs, and other religious minorities are free to preserve their own personal law, to practice their religion as they see fit, to seek protection for their language and culture, but not to demand either a separate state for their community even within the Indian Union or separate electorates or any form of proportional representation in elected or appointed government bodies.

In the transformation of the Congress from a mass movement claiming to represent the entire nation into a political party engaged in free and open competition with other parties for dominance in a democratic political system, however, the Congress leaders had to make a number of changes and compromises in relation to other groups whose demands were neither secessionist nor communal religious. They had to decide how to treat dissident movements and forces of all sorts. During the Independence struggle, Congress leaders had shown little tolerance for any kind of dissent which seemed in any way to threaten the unity of the movement against the British authorities. Yet, the leaders themselves knew that some groups, despite their own desires to the contrary, had been left out of the movement and that some potentially divisive problems had been put aside and now had to be dealt with. In dealing with internal and external dissident forces, the leaders of the Indian National Congress have followed hegemonic policies of absorption in relation to some groups, have deliberately set out to destroy others, and have adopted tolerant and conciliatory stances in relation to still others.

Scheduled Castes had largely been left out of the Congress during the nationalist movement and its leaders set out to rectify this situation quickly after Independence by such measures as giving Dr. Ambedkar, the great untouchable leader, a central role in the Constitution-making process, by seeking to provide other Scheduled Caste persons with positions as ministers in the central and state governments, and by pursuing a variety of preferential policies designed to improve their social standing and ameliorate their economic deprivations.

Another group left out of the pre-Independence Congress, even more than the Scheduled Castes, were the Scheduled Tribes. In the early post-Independence years, the Congress and the central and state governments adopted a number of policies designed to promote tribal development while protecting the tribal peoples. These included: reservation of seats in the legislatures and positions in administrative services for Scheduled Tribes, as for the Scheduled Castes, and provision of other special benefits such as educational scholarships; establishment of development blocks specifically for tribal people in which they lived in large numbers; and enactment or enforcement of existing legislation to protect tribal peoples from exorbitant interest rate charges by moneylenders and from loss of their lands to non-tribal peoples.

Other groups, such as the former landlords and princes, were treated quite differently. They were considered collaborators with the British, representatives of an outdated feudal order, and exploiters of the peasantry which provided the bulk of the political support for the Congress in the countryside. The Congress had, for the most part, avoided supporting direct class confrontations between the tenants and landlords in British-ruled India in order to preserve maximum unity in the fight against the British themselves. However, once Independence was achieved, the former princes were expropriated and the former princely states were merged in the adjoining or surrounding Union states while the Congress governments in most states moved to abolish landlordism through the passage of various land reform measures such as abolition of all intermediaries between the cultivator and the state.

In relation to political opposition groups, the Congress was prepared to allow free and open competition. This did not, however, stop the Congress from adopting quite ruthless political tactics to defeat such early opposition parties as the Socialists who split from the Congress in 1948, the left wing of the Communist party in the 1960s, and, from time to time, adopting repressive measures against parties considered to be communal, both Hindu and Muslim. Moreover, in general, the Congress has sought to absorb political dissident movements it could not defeat in the electoral arena, on terms that any political group so absorbed must give up all vestiges of an independent political organization and its members join the party as individuals. It tolerated considerable internal factionalism provided no groups formed permanently with ideological goals that differed from the official Congress policy. And it was always clear, before and after Independence, that there was a "High Command" of Congress leaders, who exercised final authority in the country in relation to state and local factional conflicts that threatened to damage the party in any large part of the country. Terrorist groups, though sometimes acknowledged as true patriots, were not condoned within the Congress. Nor did it tolerate the military style of nationalism promoted by the great Bengali political leader, Subhash Chandra Bose, who resigned from the Congress presidency in 1939 in the face of total opposition to him and his policies from Mahatma Gandhi.

On the other hand, Gandhi's tactics of non-violent resistance to untruth and injustice, which included a variety of individual and mass protest techniques, had become embedded in Congress ideology and practice. Some even argued in the Constituent Assembly that *satyagraha*[2] was a fundamental right of the people. Other Congress leaders, however, argued that now that India was independent and functioning with a competitive parliamentary system, such techniques no longer had a legitimate place. In practice, the Congress governments at the Centre since Independence have followed an ambiguous policy towards such extra-constitutional, non-violent forms of protest. On the one hand, they have often been allowed; on the other, the Constitution armed the state with several measures, most notably, preventive detention, which allowed the government of the day to deal effectively, even in advance, with any protest that threatened to become violent or was too inconvenient for the ruling party to tolerate. This exemplifies the adaptation of parliamentarism and constitutionalism in India to the particular practices of Indian society - here, in the institutionalisation of a process of extra-constitutional confrontation between the state and dissident groups in which both sides use as a matter of course measures that are uncommon in Western parliamentary systems.

LEADING IDEAS OF THE NATIONALIST ELITE AT INDEPENDENCE

The ideas of the nationalist elite at Independence can be summarized under these headings: sovereignty, unity, order, a strong state, secularism, democracy and parliamentarism, economic self-sufficiency and the need for social and economic reform. The nationalist leaders at Independence were determined to declare for all the world to hear and for any internal dissidents who had a different view that India was to be a sovereign independent republic. In the Constituent Assembly, speakers denounced and ridiculed Winston Churchill who had cast doubts on the sovereign representative character of the Assembly, invited the leaders of the Muslim League to join its deliberations but insisted that,

if they did not, the Assembly meant to speak for the nation without them, and warned the former princes that they had no divine right to rule any longer and that power in India now came from the people and its representatives in the Constituent Assembly of the country. Other speakers in the Assembly also saw India's sovereignty and independence in terms of the emergence of India not merely as an ordinary independent state but as the new leader of Asia, indeed of the world.

Unity was the second assumption of the nationalist elite. They had reluctantly accepted the partition and communal division of the country but were not reconciled to it. Many speakers in the Constituent Assembly expressed the belief that the unity of India would ultimately be restored. The partition experience also led the nationalist leaders, some of whom had previously been sympathetic to some kinds of regional, cultural, and linguistic demands, to reject sharply, in the Constituent Assembly and in the early years after Independence, any other potential division that seemed to threaten the country's unity, such as a north-south division implied in the Dravidistan slogan of the Tamil regional nationalist party, the DMK, or even the linguistic reorganization of states, which had been an implicit part of the Congress programme since the 1920s.

The nationalist leaders had always feared the potential for violence and disorder in Indian society. Gandhi's non-violence was not something that simply arose out of an indigenous tradition of peace and spirituality, but rather was a tactic which acknowledged the enormous potential for violence which existed in a highly fragmented and culturally heterogeneous society. The disintegration of public order in the Punjab, in Calcutta, and in the national capital of Delhi itself, whose streets were littered with dead bodies during the riots that accompanied partition, strengthened the determination of the nationalist elite to enforce authority in independent India, to instil discipline in its people, and to maintain order at all costs. That determination was also applied to any efforts on the part of revolutionary leaders to promote violent revolution in any part of India, a major instance being the suppression of the Communist-led insurrection in the Telengana region of Andhra between 1947 and 1951.

The early nationalist leaders believed wholeheartedly in democracy and parliamentarism. They wanted the British out, but were prepared to adopt their institutions. The leaders of the Constituent Assembly studied carefully both British and American political institutions and practices and adopted the conventions of the British parliamentary system as well as some features of American political practice such as the establishment of a Supreme Court with powers of judicial review. Advocates of the development of a set of political institutions and practices derived from Indian traditions were notable for their absence or silence in the Constituent Assembly, where Gandhian ideas of non-party government, decentralisation of power and authority, and the adoption of village self-government hardly challenged the predominant consensus which favoured rather the adoption and adaptation of foreign political models.

The nationalist leaders also felt strongly that political and economic independence were interrelated, that India could not retain control over its political destiny if it remained economically dependent on Britain and the other industrialised states of the West. Economic independence and self-sufficiency were associated with industrialisation, which required foreign economic aid in the short term, but which would soon enable India to free itself from dependence on foreign imports and from further need for foreign aid [Nayar, 1972, p. 99, 125]. These considerations were behind the drive which was launched especially at the beginning of the Second Five Year Plan in 1956 to create a massive industrial base in the country and to promote the policy of import substitution to eliminate India's dependence on foreign countries, particularly in the durable capital goods sector of the economy.

The nationalist elite held the view that India's social and economic progress had been retarded by centuries of British rule, that the country had been kept agrarian, its industrial potential arrested, its people kept backward, illiterate, and bound to outmoded forms of agricultural production. Consequently, it was necessary and urgent for the state itself to undertake the

modernization of Indian society and to institute economic reforms that would free the country from feudalism and archaic social practices. These ideas implied centralized economic planning and direct state intervention through legislation for the removal of institutions and practices - such as landlordism, untouchability, and the giving of dowry - deemed unsuited to a modern state and society in a modern world.

Secularism was another widely-shared and deeply-felt value of the Indian nationalist elite at Independence. Secularism had negative and positive aspects. It meant that communalism and political demands of any sort based on religion would no longer be tolerated in independent India. It meant that separate electorates had to be replaced by joint electorates so that all communities could discuss issues of economic well-being and advancement on a common ground. Positively, it meant that every cultural group in India was entitled to promote, preserve, and protect its cultural life, its language and script. Most important, it involved an assertion that nationalism and the nation, based on the loyalty of individuals to the state before their community, was the basis for modern politics and not religion, the deceptive slogan of the Pakistan elite.

All these leading ideas held by the nationalist elite converged to provide overwhelming justification in their minds of the need for a strong, centralized state. Once the partition decision had been reached, in the midst of deliberations in the Constituent Assembly on a fedération that would be flexible enough to accommodate the Muslim-majority as well as the Hindu-majority provinces, discussions in the Assembly took an immediate about-face in which speaker after speaker emphasised the imperative necessity for India to have a "strong Centre" and a "strong State." The state was perceived as the instrument which would establish India's sovereign independent presence in the world, would preserve its unity against foreign enemies and internal secessionists, ensure authority, order, and discipline in a society perceived as always on the brink of disorder and violence, promote economic development through centralized planning which would bring India out of the backwardness of agrarian life and free it of a social order dominated by feudal institutions and practices and by religious superstitions, and make it possible to maintain an effective parliamentary system.

INDIA'S POLITICAL CULTURE: RHETORIC VERSUS REALITY

It was commonly remarked at Independence that Indian leaders were bent upon adopting the political conventions, ideas, and practices of Western democratic societies, but that those institutions and ideas could not be separated from the societies from which they had organically evolved. India, it was argued, had an entirely different social order not suited for parliamentary institutions and egalitarian ideologies and would do better to search its own traditions for institutions more in consonance with its own culture. Those arguments were largely ignored in the Constituent Assembly, even though some of them came from Gandhi himself and his followers, mostly outside the Assembly. However, it became apparent very quickly after Independence that fundamental transformations were occurring in the actual functioning of the institutions and practices borrowed from the West in which adjustments were made that reflected indigenous cultural and behavioral patterns, but without any conscious modelling on its own traditions.

Some observers attempted to encapsulate the process of contradiction and adjustment that was going on by arguing that there were several "idioms" or "cultures" in fundamental conflict with each other - a modern or Western idiom, centred in the ideas of the nationalist elite and in the institutions in Delhi, a traditional idiom or culture, rooted in the kin, caste, and communal relations of village, locality, and province, and a "saintly" idiom characteristically Indian, associated with Gandhi and his disciples involving selfless devotion to constructive work for the good of society and immune from the mimicking of foreign models or from contamination by the archaic superstitions and feudal practices of Indian society [Weiner, 1964, ch. 2].

These useful attempts to categorise the basic contradictions between Indian politics and society, however, left many adjustments, adaptations, and everyday practices not satisfactorily explained. Little attention, for example, was paid to indigenous traditions of princely rule and their

effects upon contemporary political practices, demonstrated every day in the morning and evening durbars or audiences held by every prominent politician in the land, in the duty of prominent people to provide support and protection for their clients, in the responsibility of those political leaders who achieved power and control over public resources to distribute them lavishly to their followers, and in the practice of dynastic succession to leadership in India.

It soon became evident that there was a massive contradiction between the rhetoric of Indian public discourse and the reality of political practice, which expressed itself in many forms. For example, although the secular ideology of the Indian National Congress became dominant politically in India after Independence and the newly independent Indian state proclaimed secularism as the official state ideology, the post-Independence Indian state leadership has nevertheless felt compelled to make official distinctions between the Hindu population and the non-Hindu populations of the country by such measures as the passage of the Hindu Code Act, which established a uniform civil code for all "Hindus" (including Sikhs) in the country, while leaving Muslims with their own system of Personal Law. It has often been alleged that many of the politicians of the country who proclaim their adherence to secularism as a state ideology actually harbour Hindu communal sentiments. The persistence of explicitly Hindu political organizations and movements in contemporary Indian politics also has been widely noted.

One of the great, enduring games of political analysts of India has been to assert the tacit dominance and to predict the ultimate emergence of a militant Hindu nationalist political category which will overwhelm the Indian state and establish its mastery over the Indian population. Since the late nineteenth century, there have been numerous movements of "Hindu" political mobilisation, which have taken a variety of forms. These include the Gaurakshini (Cow Protection) Sabhas formed in the 1890s, which have agitated for laws preventing cow slaughter in India from time to time and launched a major mass movement as recently as the 1960s; the movement to promote the development and spread of a standardized Hindi language written in Devanagari script, rather than Urdu in the Persian-Arabic script, as the official language of education and administration in north India and ultimately as the official language of the country; and the Hindu Mahasabha which worked to create a Hindu political community and to define the Indian nation through symbols drawn exclusively from "Hindu" texts, beliefs, and practices and from pre-Muslim history.

This Hindu "revivalism" or militant Hindu nationalism has persisted up to the present and has manifested itself in various political organizations and movements and politicised religious movements. Such organizations and movements include: the Rashtryiya Swayamsevak Sangh (RSS), a Hindu "cultural" organisation organised into cells, whose members practice martial arts, and which promotes an exclusively Hindu definition of the Indian nation; the Jan Sangh, originally the main political offshoot of the RSS, but now a rump of quite extreme anti-Muslim supporters of Hindu nationalism; the Bharatiya Janata Party (BJP), the more broadly-based descendant of the original Jan Sangh; and such other organizations as the Vishwa Hindu Parishad, which is currently engaged in a campaign to "liberate" alleged Hindu religious sites from their occupation by Muslim mosques built on top of them.

There is also presumed to exist a Hindu "vote" in India which can be mobilized for the sake of national unity against the secessionist or otherwise excessive demands of minorities such as Sikhs and Muslims. It has been noted that in the 1984 parliamentary elections, held in the aftermath of the assassination of Mrs. Gandhi by two of her Sikh bodyguards, the issue of national unity was communalised and made into the central issue in Rajiv Gandhi's landslide election victory [Ranbir Singh, 1987 and Brass, 1985, Pp. 318-329].

Nevertheless, there remains in India today considerable ambiguity concerning the use of the word "Hindus" to define any clearly demarcated group of people in the subcontinent and considerable doubt about the existence of a Hindu political community.[3] On the one hand, the historic problem of a split between so-called

"caste" Hindus and untouchables persists in contemporary Indian politics, as do divisions among the "caste" Hindus themselves. On the other hand, there has also been an historic tendency to subsume Sikhs, Jains, and others in the "Hindu" fold. While this tendency is bitterly resented by some groups, such as most Sikhs especially, and is considered to be part of the absorptive quality of "Hinduism," it also suggests the continued indefiniteness of its religious, social and political boundaries.

Revivalist or militant Hinduism nevertheless remains a pervasive and politically important presence in contemporary Indian politics. The tendency among militant nationalist organisations such as the RSS and the BJP to insist that Hindu and Indian are virtually interchangeable categories has spread beyond the organisational confines of these two organisations. Even more pervasive and subtle has been the more recent tendency to secularise the meaning of the term Hindu by going back to its earlier meaning of "native of India" and identifying India as the nation of Hindus without, however, eliminating from it all the religious associations which are offensive to true Muslim, Sikh, and other believers.

A second example of a contradiction between rhetoric and reality in contemporary Indian politics concerns the disjunction between the language of planning, equality, socialism, and social justice spoken by party leaders in the country and the practices of day-to-day politics. Immediately after Independence, the leading opposition parties were the Communists and the Socialists, promoting variants of the wholly Western ideologies associated with those labels. Yet, those ideologies bore little relation to the social structure of Indian society, which lacked the class distinctions and contradictions upon which the ideologies were based. None of the political parties in India proved able to imitate the European political party traditions of disciplined behavior in the legislatures to which they were elected. Instead, Indian politicians began early to display, indeed had been practising at the local levels since the nineteenth century, a strong penchant for opportunistic behavior in pursuit of personal ambition to achieve high office and control public resources for personal advantage and for distribution to one's followers.

The reason for this persisting disjunction between public political party discourse and actual political practice, which render meaningful comparisons between Indian and western political parties difficult, is that the issues and social forces which impinge upon party politics in India today are entirely different from those which have confronted either contemporary or nineteenth century Europe and America. There are three such sets of issues, social forces, and aspects of social structure that contribute to the distinctiveness of Indian politics: the issues of control over agrarian resources, including control over land and the work force; social fragmentation; and centre-locality relationships. The primary economic, social, and political resources in India today continue to be land and its products and the primary struggles concern access to inputs necessary to increase productivity and control over the produce from the land. Land being inherently a local resource and rural social classes being notoriously difficult to recruit into permanent extra-local organisations, the importance of land control and issues relating to it necessarily impart a local and personal character to politics. Governments in India may pass laws abolishing landlords and intermediaries, establishing land ceilings, and protecting tenants, but their implementation depends upon local patterns of domination and control over land, resources, and people.

Those who get elected to state legislatures from rural constituencies themselves either come from important local land controlling communities or depend for support upon them. What matters most to such people is local influence with government departments that disperse resources for agriculture, adjudicate land matters, or control the local population, particularly the police. These local politicians do not care much for party manifestoes, policy pronouncements, and development goals. They will vote as disciplined members of ruling parties in the legislatures so long as it gives them access to ministers in the state government who control local resources and local administration and until there is no better alternative. When there is a better alternative,

particularly one that gives them a place in a ministry where they can exercise direct control over local resources, they will defect and switch to another party or coalition.

The second great feature of Indian society that imparts a distinctive character to Indian politics is the social fragmentation associated with caste. Caste too, in some of its most fundamental aspects, permeates Indian politics with local and personal features. Success in elections in rural constituencies depends primarily upon the ability to establish a base in one of the locally dominant, land controlling castes and then combining that support with an effective approach to one or more other important local caste groups or a low caste group or the local Muslim minority. Influence in the bureaucracy and in public agencies generally depends upon personal networks of kinship and caste. Legislators and politicians generally who depend upon such local support bases and are themselves part of such personal networks again are not moved or inspired by party manifestoes and pronouncements, but are moved by what benefits they can get to distribute to their supporters, friends, and relations.

These two great features of Indian political economy and social structure - land control and caste - also contribute to a third political characteristic that imparts distinctiveness to Indian politics, namely, the necessity for those who wish to build power in state and national contexts to maintain direct or indirect links with those who can control local structures of power. Since government now provides or controls the greatest share of external resources of use in the local environments and since government also can threaten the hold of powerful local groups through land laws or police harassment, it is equally important for locally powerful persons to maintain connections with those who wield power in the state and national governments. These relations once again do not concern ideology, policy, and programmes but concern control over resources and people, protection from harassment by the bureaucracy and the police, and the trading of political support and votes for such resources, protection, and other services. It should hardly be surprising, therefore, that the public politics of Indian political parties and legislatures, which are modelled after the British pattern and in which a language familiar to students of European politics is spoken, should in fact be dominated by faction, personal and local interest networks, struggles over patronage and distribution of resources, and political opportunism.

Indian politics have lacked the ideological underpinnings of European political traditions. In common with American political traditions, however, there is a strong moral streak in Indian commentary on politics which is displayed in constant condemnation of the corruption of the politicians and the bureaucrats and of the relentless pursuit of power. Such moralism, usually drawing inspiration from Gandhian ideals, gives force from time to time to mass mobilisations to bring down the ruling party. However, these mobilisations have not so far been as effective as the recurrent reform movements which every now and then have transformed American institutions and political practices. Nor has it been possible for most political parties in India to adhere to a consistent ideology in the manner of many European parties which formulate manifestoes, whose programmes they actually implement when they achieve power. Rather, Indian politics have been characterized by an all-pervasive instrumentalism which washes away party manifestoes, rhetoric, and effective implementation of policies in an unending competition for power, status, and profit.

If American political traditions have continued to emphasise the importance of limiting the role of the state while Western Europe has adopted the model of the welfare state and the Socialist countries the model of a socially transforming state, India has adopted the model of the state which exists for its own sake. It is a good in itself and the source of all goods. It exists to provide everything that Indians need and require: sovereignty, unity, welfare, jobs for all, social justice. It is the duty of the state and the holders of its offices, moreover, to provide these goods and services directly to the people, irrespective of any ideology or any notion of a broad common good. It is there to serve everybody's interests, not just an abstract "public interest". Of course, no state can serve everybody's interests and the Indian

state has not succeeded in doing so. The contradictions between the foreign models adopted, the Indian traditions which have permeated the actual practices within the Western-derived institutions, and what can actually be achieved in an agrarian society, a caste-dominated social order, and a heterogeneous civilization have been of the essence of Indian politics since Independence.

POLITICAL LEADERSHIP, MOBILIZATION AND STATECRAFT IN PRE- AND POST-INDEPENDENCE POLITICS

One of the persisting disjunctions in pre- and post-Independence Indian politics is that between mobilisation and "statecraft", between the bases for mass mobilisation of the people and the actual political goals of the leaders. This disjunction was introduced into Indian politics with the rise of Gandhi and his famous mass movements, beginning from 1920-21. The mass of the people who flocked to see and hear Gandhi as he toured the country and who participated in the great movements launched by him from time to time were moved more by traditional religious beliefs, including the belief that Gandhi himself was a saint or god upon earth who would bring miraculous changes in their present or future well-being and happiness, than by the specific political and economic demands made in the Congress charter of demands [Amin, 1984, Pp. 1-61]. There was in the Congress itself a clear division between Gandhi's leadership role and the parts played by other leaders such as Sardar Patel and Jawaharlal Nehru among others. Gandhi himself kept aloof from statecraft - though not from practical politics - and left the day-to-day functioning of the Congress and later the government of the country to Patel and Nehru.

This tradition of a disjunction between mobilisation and statecraft did not always imply, however, a division among the persons performing the separate tasks. Jinnah, for example, who was an early opponent of the mass mobilisation techniques of Gandhi, which he saw as nothing but rabble-rousing, and who was in his early career oriented exclusively towards statecraft, at the end of his life performed both roles. In the great mobilisation of the Muslim population of the subcontinent, Jinnah roused the Muslim masses behind the slogan of "Islam in danger," around a theme that implied the creation of an Islamic state, a land of the pure and the faithful when, in fact, he had no more in view than the creation of a modern, liberal, secular state in which Muslims would be in a majority.

In modern Sikh politics as well, there has been a division of roles and leadership between institutions and persons closer to the religious beliefs of the masses, on the one hand, and the politicians oriented towards party leadership and control of government in the Punjab. The secular leaders of the Sikh political party, the Akali Dal, are not equal to the task of mass mobilisation and, therefore, require political alliance with a *sant*, a preacher or holy man, in order to preserve their own leadership, consolidate their control over the Akali Dal, or lead a successful political movement in pursuit of a set of political goals.

This division of roles or disjunction of political practices is, in fact, widespread in Indian politics [Chatterjee, 1984, Pp. 186-187]. Even those politicians who deliberately set out to avoid the use of such techniques, or even condemn it, cannot escape the popular mentalities which attribute to them religious or other more-than-human, charismatic qualities essential to successful leadership in contemporary Indian politics. Nehru condemned every sort of "casteism, communalism, provincialism" and parochialism in his public speeches everywhere in India and was rewarded by the devotion of the Brahmans throughout north India and the adulation of the Hindu masses who probably saw him, as they saw Gandhi, as a living god on earth. We have no studies of mass perceptions of Mrs. Indira Gandhi, but it is certain that she was widely perceived in the image of the female goddess and mother of the people of India and was, in fact, often called late in life "Mataji" or "mother" with somewhat more reverence than that ordinarily due to an older woman and mother of children in India.

Contemporary Indian politics have also witnessed the rise of film stars to the leadership of two south Indian states, Tamil Nadu and Andhra Pradesh. In both cases, these film stars were of a different sort from Ronald Reagan, for their film roles were of mythopoeic characters and their

audiences identified them with the heroes and gods whom they played on the screen. In these cases, however, there has been a reunion of roles in which the mass mobiliser and the master of statecraft merge into a single demagogic type.

The irony, however, is that this type of disjunction is not the kind which Gandhi himself could have sought. It is more likely, rather, that Gandhi himself sought to maintain a distance between the exercise of moral authority, on the one hand, and political action and the practice of statecraft, on the other. There was an implicit assumption in Gandhi's stance that power and political responsibility in state institutions were inherently corrupting and an explicit statement that freedom from British rule was less important than self-mastery. Indeed, most of the techniques adopted by Gandhi during his mass movements involved abstention, non-cooperation, and withdrawal from participation in institutions designed for India by the British. He left the definition of the means of gaining control of such institutions for the statesmen of the Congress.

This disjunction between moral and political authority has also continued to play its part in post-Independence Indian politics [Chatterjee, Pp. 186-187]. Like the other disjunction, it has sometimes involved a division of political roles and responsibilities or of institutions, but it has often also involved the same person attempting to adopt both stances. One form it has taken has been the disavowal by the acknowledged leader of a party of any desire for public office. Rammanohar Lohia, the famous radical Socialist leader who died in 1969, adopted this form, refusing to accept any formal leadership in his party and disavowing any desire for high political office beyond his membership in Parliament. Jayaprakash Narayan adopted the different strategy of withdrawal from the political arena into constructive work in the villages, while acting at the same time as a moral critic of political authority and moral adviser to practicing politicians until his own sense of moral outrage against Mrs. Gandhi's authoritarian and perceived corrupting leadership of the country led him to take the lead as mass mobiliser in a movement to displace her from power. The third form in which this disjunction between moral and political authority has expressed itself has been in the attempt by some politicians to play crusading roles without withdrawing from politics and without renouncing political ambitions. For such politicians, their constant refrain is the need to cleanse Indian politics of its corruption and of their corrupt rivals.

In 1988, in preparation for the Ninth General Elections anticipated in 1989, a political struggle was being waged between a former Congress minister in the central government and former chief minister of Uttar Pradesh (U.P.), Vishwanath Pratap Singh and Rajiv Gandhi. The former resigned from office in 1987 in disgust over the alleged gross corruption by the holders of high office in connection with defence contracts which, it was implied, had not left the Prime Minister himself unsullied. In his initial resignation, he also stated explicitly his intention to avoid in future the acceptance of any office of state. However, in victory, he failed to adhere to his vow, and to conform to the role established by Gandhi and repeated by Jayaprakash Narayan after the Janata victory in the 1977 elections of remaining aloof from the actual exercise of power in order to retain the purity of moral authority.

A third legacy of Gandhi which has become even more attenuated than the other two concerns the proper role of leadership in relation to the masses. Gandhi was a mass mobiliser of unprecedented skill in India who was using his skill to build a movement to expel the British from India. Yet, he distrusted the people and, by one account, even considered them at bottom a "mob," subject to immoral behavior and prone to violence [Chatterjee, 1984, p. 185]. Mobilisation required simultaneously moral upliftment and leadership to prevent the transformation of mass political action into criminal activity and violence.

Gandhi also was clearly aware that contemporary Indian society was internally divided into castes and religious communities. Effective mobilisation of the heterogeneous fragments of Hindu society required, therefore, the use of transcendent Hindu symbols to emphasise Hindu unity while at the same time making special appeals for Hindu-Muslim unity. It has often been pointed out that there was a problem of contradiction between the two goals, which Gandhi

never resolved himself, though he was prepared to risk his own life for the second goal and did, in the end, become a martyr to it at the hands of a fanatical Hindu assassin.

In the post-Independence era, numerous variations on Gandhi's techniques of mass mobilisation have been applied countless times in movements small and great. Increasingly, however, mass mobilisation has become associated more with competitive demagogy, with the manipulation of symbols for the sole purpose of building a political following to win an election, or to achieve some other purpose and with scant regard for any moral goal.

INTRA-PROVINCIAL POLITICS AND CENTRE-PROVINCIAL RELATIONS BEFORE AND AFTER INDEPENDENCE

The difficulties of constructing all-India social movements and political organisations and of mobilising the mass of the people around all-India symbols of unity or opposition arise partly out of the inherent cultural diversity of the peoples of India, partly out of the significance of local issues of land control, but also out of the dynamics of intra-provincial politics and centre-provincial relations in India's multi-level political system. Those dynamics have operated repeatedly in similar ways, whose main patterns are the following.

Firstly, at every level of the system, factionalism, personalism, and opportunism rather than ideology, party ties, nationalism, or communalism have structured routine conflict and alliance patterns. Factional conflicts are sometimes suppressed or attenuated at the bottom and the top of the system: at the bottom, when some local leader or leaders have overwhelming power; at the top, where it is hard to maintain the links in the chain of support that lead to a leader's local structures of power. At the middle levels, particularly at the provincial levels, factionalism is generally rampant.

The second feature is the principle of interference or intrusion of politics from higher levels into lower levels. This principle has had two bases. It has operated because of the absence of any doctrine of the autonomy of local bodies or "states' rights" and the presence instead of a presumed right of higher authority to intervene to maintain order at lower levels. The second basis has lain in the need either for support at lower levels in the system to build power at higher levels or for a transcendent appeal to overcome or bypass the essentially local character of politics and structures of power in Indian politics.

The third feature of routine politics in India has been the pervasiveness in provincial and local politics of intra-communal political divisions and inter-elite cooperation across communal boundaries. The fourth feature follows from the other three and may be called the principle of division, a variation on the theme of "divide and rule". In routine politics in India, power at each level and especially across levels is attained by dividing the opposition, not by oppressing it. One offers "inducements": ministerships, patronage, non-interference in a leader's local base, cash.

The fifth feature, however, runs counter to the others to some extent. It is the principle of hierarchical loyalties, which is based on the existence in India of ascending levels of loyalty running from *jati* (the local caste group) to nation, with many intermediate stages in between, that can be called upon by leaders and movements to build support through communal unity rather than through division of the opposition. It operates at the mass level and influences popular allegiances at moments of choice, such as elections, mass movements, or communal riots. It presents itself in the form of dichotomous oppositions between caste groups, religious communities, nationalists against British rulers, and occurs whenever structures of opportunity are created to facilitate or precipitate such oppositions.

The sixth feature is the premium on charismatic or demagogic leadership that can call upon the appropriate loyalties at critical moments to transcend the features of routine politics identified above, particularly at the mass level. The strategy of dealing with local leaders then becomes one not of dividing leadership groups, but of threatening to undercut the leader's local bases of support with an appeal that will move his local supporters and break temporarily local links and allegiances. There have been several kinds of leaders in South Asian political history with this kind of capacity. One type, of which Gandhi was the preeminent example, rose to prominence

through both mass leadership achieved through struggle and effective liaison with provincial leaders. He retained no local political base for himself and sought no national power for himself.

A second type, represented by the Nehru family, achieved national power through direct anointment by Gandhi, in the case of Nehru, or through their own parents, as in the cases of Mrs. Gandhi and Rajiv. Father and daughter, however, retained their powers in different ways, the father by maintaining bargaining relations with provincial leaders, the daughter by destroying them. Both, however, maintained direct popular or demagogic links with the masses. Rajiv, who oscillated between the methods of his grandfather and his mother and lacked any distinctive leadership qualities of his own, survived until his assassination in May 1991 largely on the basis of 'divine right'.

The third type is exemplified by Jinnah, who built upon personal reputation rather than mass leadership, who was not really anointed by anyone but himself for the leadership role he ultimately adopted but who, at last, his own personal dispositions to the contrary notwithstanding, had to take up the same dual role that both Gandhi and the Nehru adopted: plebiscitary or demagogic appeals directly to the masses combined with direct bargaining with political leaders.

It is a recurring feature of Indian political history that only a charismatic leader with a simple appeal can unite the subcontinent or any of its larger peoples for a political purpose. While the prevailing tendencies in normal times are towards disaggregation of power, regionalism, and opportunism, the desire to centralise power in India leads to efforts to nationalise issues, which also means their simplification and symbolisation in slogans, which in turn places a high premium on charismatic or demagogic leadership. However, such mobilisation is evanescent; power so aggregated soon crumbles, and defection and the scramble for places reemerges immediately the dust settles. From Gandhi's first great mass movement, the non-cooperation/khilafat movement of 1920-21 to the Rajiv Gandhi landslide election of 1984, Indian politics have oscillated between the sordid, everyday, patronage politics of the provincial and local politicians and the enthusiasms aroused by mass popular leaders.

NOTES

1. 'Centre' is the most common term used to refer to the union government in India. It carries the same sense as in the United States practice of referring to the national government in Washington D.C. as the 'federal government'. However, in addition, the term is also used sometimes to allude to actions and decisions which flow from leadership circles in New Delhi as opposed to the State capitals.

2. *Satyagraha:* Gandhi's term for active, non-violent persistence in the pursuit of truth and justice in the face of the exercise of alien or unjust authority.

3. For the development of the term 'Hindu' and 'Hinduism' in modern India see Frykenberg, 1988, Pp. 1-29.

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CENTRE-STATE FINANCIAL RELATIONS IN INDIA: 1870-1990

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This paper reviews the course of Centre-State financial relations in India since 1870, of course, with greater attention paid to the developments of the last four decades (1950-90). It describes pre-1947 arrangements for intergovernmental financial transfers and their bearing on the making of the Constitution. The post-Independence relations are examined in terms of various categories of Central transfers to the States, the role of Finance Commission and Planning Commission in such transfers, and the principles followed by them for inter-State distribution. The overall magnitude of Central transfers to restore vertical balance and their redistributory role to correct horizontal imbalances are also evaluated. Current problems and controversies besetting Centre-State relations are highlighted from various viewpoints. The work is based mainly on official reports/documents.

PRE-INDEPENDENCE DEVELOPMENTS

The present fiscal structure of India is the result of a gradual evolution over the last 120 years. A look back at the pre-1947 developments in fiscal federalism is necessary to understand influences on the framing of the Constitution of independent India, and the present position and trends in Centre-State relations.

After the events of 1857, the British Crown assumed sovereignty over India from the East India Company in 1858. Prior to 1871, the administration of the country was rigidly centralised, characterized by absolute imperial control over Provincial revenues and expenditures. Provinces (or states) were entirely dependent on annual cash assignments from the Centre for the maintenance of their administration. But, in due course, the Central Government realised that some degree of decentralisation of authority to Provinces was necessary.

The Mayo Scheme

Decentralization of finances began with the resolution of Lord Mayo issued on December 14, 1870. The Mayo resolution explained the scheme by which the Government of India envisaged enlargement of the powers and responsibilities of the Provinces. Thus, services like jails, police, education, medical, roads, and civil works were transferred to the administrative control of the Provinces and to meet their costs, the departmental receipts under these heads were also assigned to them. However, due to inadequacy of these new heads of revenue, the existing system of fixed grants from Central revenues also continued. This arrangement came to be known as 'Provincial Financial Settlements'. The next step was taken in 1877 when subjects like land revenue, and general administration were transferred to the Provinces. The Mayo settlements were subject to revision annually, but from 1882, they were made quinquennially. Over the period 1882 to 1904, these settlements gave rise to the system of 'divided heads of revenue' under which Provinces were given a share in certain growing sources of revenue like irrigation charges, excise duties, and stamp duties. At the same time, the system of fixed cash assignments was continued. In 1904, the settlements were made quasi-permanent and in 1911 began the period of permanent settlements. 'The intention of the Government in adopting this change was on the one hand to give more elasticity to the settlements and more freedom to Local Governments in working them, and, on the other hand, to protect the general tax-payer of India against possible mismanagement in any particular province, and to put an end to the frequent and undesirable controversies over the adequacy of the existing settlements' [Todhunter, 1924-25, Vol. I, para 513].

The Act of 1919

The next landmark in the history of Centre-State financial relations was the Montague-Chelmsford Report on Constitutional Reforms which led to the passing of the Government of India Act, 1919. The Act sought to secure for the Provinces a greater degree of financial independence by

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abolishing the 'divided heads' and effecting a complete separation between the Central and Provincial heads of revenue. Thus, revenue heads like income tax, non-alcoholic excises including salt, customs, currency and mint, and contributions from railways, and posts and telegraphs came to the share of the Central Government, while relatively inelastic sources of revenue like land revenue, alcoholic excises, irrigation charges, judicial stamps, forest receipts, and registration fee were assigned to the Provinces. These arrangements enabled the Provinces to run their administration with the help of revenue raised by themselves. The Provincial budgets were separated from that of the Government of India and each Province presented its own budget and levied taxes assigned to it. The Montague-Chelmsford Report had estimated that, with revenue heads distributed on these lines, there would remain a large deficit in the Government of India budget and, therefore, had proposed that the Provinces should make contributions to the Central budget. Consequently, to advise on the amounts of Provincial contributions, the Financial Relations Committee was appointed under the chairmanship of Lord Meston which reported in March 1920.

The Committee proposed, *inter alia,* a scheme of initial contributions and of standard contributions to be attained over a period of seven years. The initial contributions were calculated on the basis of the increased spending power of each Province resulting from the new scheme of the separation of the sources of revenue. The standard contributions were computed on the basis of the relative taxable capacity of the Provinces and other economic factors. However, the latter never came into operation. From the very beginning, the scheme of 'Provincial contributions' came in for sharp criticism from various quarters, particularly from the Provinces themselves. The trends in the Central and Provincial budgets in the early 1920's vindicated the stand of the critics and the contributions were abolished from 1928-29. Provincial contributions under the Meston Settlement during the 1920s provide, perhaps, the only example of transfer of funds from the Provinces to the Centre in the long history of fiscal federalism in India.

In the meantime, the Indian Taxation Enquiry Committee (1924-25) examined, *inter alia,* the division of sources of revenue between the Centre and the Provinces. It recommended that the excise duty on country-made foreign liquor, excise on opium, and general stamps should be transferred to the Centre. The recommendation regarding said excises on liquor and opium was rejected by the Government in view of administrative difficulties involved. Similarly, owing to stiff opposition from the Provinces, the proposal to centralize general stamps was dropped and only duties on documents of commercial nature were transferred to the Central Government. The proposal of the Committee to give the provinces a small share of the receipts of the corporation tax was also rejected by the Government. Except for this, the framework of fiscal federalism set up in 1919 remained unaltered, by and large, till the Government of India Act, 1935 came into operation.

The Act of 1935

'The experience of the nineteen-twenties led, however, to the emergence of the idea that the authority most suited for discharging a particular governmental function need not necessarily be the authority most suited to raise the financial resources required to discharge the function. The taxes on income had already been recognised before 1919 as a balancing factor and it continued to be recognised as such after 1935. But it also came to be recognised that other taxes could appropriately be levied and collected by the Central Government and distributed, wholly or partly, to the Provinces or States. The Government of India Act of 1935 recognised this principle' [Finance Commission, 1965, para 10]. The Act was a step towards consolidation and enhancement of Provincial autonomy in matters of resources and functions. It divided taxation heads into the following broad categories, (a) taxes levied by and meant exclusively for the Central Government, (b) taxes levied by and meant exclusively for Provincial Governments, and (c) taxes levied by the Centre but shared with the Provinces or completely assigned to them, and thus laid the foundation for the structure of

Centre-State financial relations as incorporated in the Constitution of independent India.

The Act also provided for grants-in-aid from the Centre to the Provinces in need of assistance. The main provisions of the Act relating to the subject under study were as follows: (1) Agricultural income tax was included in the list of Provincial subjects; (2) Provision was made under Section 138 of the Act for the assignment to Provinces of a percentage of the net proceeds of taxes on income other than agricultural income; (3) Section 140 of the Act provided that duties on salt, Central duties of excise, and export duties, while levied and collected by the Centre would, if an Act of Central legislature so provided, be assigned wholly or in part to the Provinces; (4) Under Section 142, provision was made for the payment of grants-in-aid of the revenues of such Provinces as might be in need of assistance; (5) The Act also provided for the levy by Central legislation of duties in respect of succession to property other than agricultural land, stamp duties, terminal taxes on goods and passengers carried by railway or air and taxes on railway fares and freights, and for the distribution of net proceeds to the Provinces.

Several questions were left to be determined by the Government and Sir Otto Niemeyer was appointed for the purpose. His main recommendations, contained in the Indian Financial Enquiry Report 1936, were (1) that 50 per cent of the net proceeds of income tax should be assigned to the Provinces; (2) that the share of jute-growing Provinces in the jute export duty be raised by 12.5 per cent to 62.5 per cent of the net proceeds of the duty; (3) the outstanding debts to the Centre of Bengal, Bihar, Assam, North-West Frontier Province, and Orissa, contracted prior to April 1, 1936 be cancelled, and the outstanding debt of the Central Provinces be reduced; and (4) annual grants of different amounts were also recommended for United Provinces, Assam, North-West Frontier Province, Orissa, and Sind. These recommendations were accepted by the Government and were embodied in the Government of India (Distribution of Revenues) Order, 1936. This Order, subject to a change made in 1940 in the wake of World War II,[1] continued to regulate the allocation of resources between the Centre and the Provinces until the partition of the country in 1947 [Finance Commission, 1952, Ch. II, para 26]. With the Partition some adjustments became necessary. In the distribution of both income tax and jute export duty, the shares of the divided Provinces of Bengal and the Punjab were reduced in proportion to population while the shares of Sind and North-West Frontier Province were pooled for distribution so far as income tax was concerned. Regarding jute export duty, the provincial share was reduced from 62.5 per cent to 20 per cent, roughly in proportion to the jute area which remained in India.

It may be noted that Princely States enjoyed internal financial autonomy and therefore did not form part of the structure of public finances of British India. They had separate budgets and separate sources of revenue. After Independence, the former Princely States were integrated into the fiscal and financial system of the country.

At the time of drafting of the new Constitution, the financial provisions in the Draft Constitution were referred to an Expert Committee headed by Shri N. R. Sarkar. Its main recommendations were: (1) the whole of income tax, including corporation tax, should be shared between the Centre and the Units in the ratio of 40:60; (2) the existing arrangements for the sharing of the net proceeds of jute export duty with the Provinces should be terminated; (3) Provincial Governments should be given some share of Central excise duties so as to impart a better balance to their revenue structure; (4) that a Finance Commission should be set up to deal with matters connected with the division of revenues between the Centre and the States and the States *inter se*.

Since a Finance Commission could not be appointed immediately after the commencement of the Constitution, the States' share of income tax and the payment of grants-in-aid had to be regulated by the Order of the President during the intervening period. Some of the States were not happy with the arrangements regarding the allocation of income tax and the jute export duty made by the Government immediately after the Partition. Hence, Shri C. D. Deshmukh was requested to enquire into and decide these matters. Deshmukh enquiry confined itself to the reallocation of the percentages released as a result of

the Partition from the share of the divided Provinces and the Provinces wholly included in Pakistan. Table 1 records the percentage distribution among the States of their share of income tax before the partition, immediately after the partition, and under the Deshmukh award. Deshmukh enquiry recommended also grants-in-aid in lieu of a share in jute export duty to the affected States. The grants were to be paid each year to West Bengal (Rs 105 lakh), Assam (Rs 40 lakh), Bihar (Rs 35 lakh), and Orissa (Rs 5 lakh) until the Finance Commission proposed any revision. The Deshmukh award came into operation from April 1, 1950 and remained in force till March 31, 1952.

TABLE 1. PERCENTAGE DISTRIBUTION AMONG THE STATES OF THEIR SHARE OF INCOME TAX

States	Pre-partition share	Share under Government of India allocation	Share under Deshmukh award
Madras	15	18	17.5
Bombay	20	21	21.0
West Bengal	20	12	13.5
Uttar Pradesh	15	19	18.0
Punjab	8	5	5.5
Bihar	10	13	12.5
Madhya Pradesh	5	6	6.0
Assam	2	3	3.0
Orissa	2	3	3.0

Pre-partition shares shown against West Bengal, Punjab, and Assam relate to the undivided Provinces.
Source: *Report of the Finance Commission*, 1952, Ch. II, para 31.

FINANCIAL RELATIONS UNDER THE CONSTITUTION

The Constitution of India, adopted on November 26, 1949, became operative on January 26, 1950. It provides for two layers of Government, one at the Central level, and the other at the level of States. 'In a country too large and diverse for a unitary form of Government', the Constitution-framers 'envisaged a system which would be worked in co-operation by the two levels of government - national and regional - as a common endeavour to serve the people. Such a system, it was conceived, would be most suited to Indian conditions as it would at once have the advantages of a strong unified central power, and the essential values of federalism.' [Sarkaria Commission, 1988, Part I, para 1.2.26]. A federal system of government combines in itself the advantages of economic integration and decentralised decision-making. Economic integration promotes industrial and defence capabilities of the nation while decentralisation meets the politico-economic aspirations of the people at the sub-national level.

A federal polity of this kind requires division of powers and responsibilities between the Centre and the States. The legislative powers and functions of the two tiers of Government are defined in the three lists in the Seventh Schedule of the Constitution: matters of national concern are placed in the Union List and those of purely State or local significance in the State List; matters of common Centre-State interest are included in the Concurrent List. The Centre has exclusive power to legislate in respect of matters contained in List I (Union List) such as defence, foreign affairs, citizenship, railways, posts and telegraphs, telephones, broadcasting, airways, banking, coinage, and currency. Entries 82 to 92B of this list pertain to taxation powers. Similarly, States enjoy the power to legislate on matters mentioned in List II (State List), such as public order, police, public health, local government, agriculture, and fisheries. Entries 45 to 63 of this list relate to taxation powers of the States. The Centre and the States both have legislative powers on matters in List III (Concurrent List) such as marriage and divorce, forests, economic and social planning, population control and family planning, legal, medical, and other professions. This list does not contain any head of taxation which means the Centre and the States have no concurrent powers of taxation. Residuary powers of legislation including taxation belong to the Centre as per Entry 97 of List I.

Although a State Legislature has the power to levy any of the taxes mentioned in List II, in the case of certain taxes, this power is subject to certain restrictions imposed by certain substantive provisions of the Constitution. For instance: (i) The power to impose taxes on the sale or purchase of goods other than newspapers belongs to the States (vide entry 54 of List II). However, Article 286 ensures that sales taxes imposed by the States do not interfere with imports and exports or inter-State trade and commerce which are matters of national importance; (ii) A State Legislature is empowered to levy a tax on professions, trade, calling or employment (vide entry 60 of List II). However, the total amount payable in respect of any one person to the State by way of such tax is not to exceed Rs 2,500 per annum [Article 276(2)].

The supremacy of the Union is implied in the distribution of legislative power. Thus, with respect to a matter, there is irreconcilable conflict or overlapping as between the three lists, the legislative power of the States must yield to that of the Union. This is how the non-obstante provisions of clauses (1) and (2) of Article 246 are interpreted. Similarly, Article 254(1) states that a law made by a State legislature, repugnant to a law made by the Union legislature or an existing law applicable in that State, in regard to any matter enumerated in the Concurrent List, shall be void to the extent of repugnancy.

Further, under Article 360, if the President is satisfied that a situation has arisen whereby the financial stability or credit of India or of any part of its territory is threatened, he may proclaim a financial emergency. When such an emergency is in operation, the executive authority of the Union extends to the giving of directions to any State for purpose of securing observance of canons of financial propriety.

The Constitutional division of the areas of taxation between the Centre and the States rests on economic and administrative rationale. Taxes with inter-State base and those in the case of which all-India uniformity in rates is desirable to facilitate industry and trade are vested in the Central Government. Also, the taxes which the taxpayer can evade by shifting his habitat, or where the place of residence is not a correct guide to the true incidence of the tax, belong to the Centre. Taxes which are location-specific and relate to subjects of local consumption are with the States. Broadly speaking, taxes on production, with some exceptions, are levied by the Centre and taxes on sale and purchase by the State Governments. The distribution of taxation powers between the Centre and the States is meant to minimise tax problems in a federal set up such as double taxation, tax rivalry among States, duplicate tax administration, and tax evasion. Nevertheless, a scrutiny of the taxation powers contained in the Union List and the State List reveals that major and elastic sources of tax revenue belong to the Centre, while relatively inelastic sources of revenue come under the purview of State Governments. Moreover, the Centre enjoys almost unlimited powers to borrow in the domestic market as well as from abroad whereas borrowing powers of the States are subject to various restrictions.

Mechanism of Transfers

Exact correspondence of resources and functions is not possible to secure in any federal situation. The mis-match between functions and taxation powers occurs partly because of changing responsibilities of different governments and partly because of the dominant position of the national government in regard to taxation powers, which is often by design. Therefore, a kind of vertical imbalance of resources and expenditure responsibilities emerges between different levels of government calling for transfer of resources from the Centre to the States for which the Constitution provides for a wide variety of arrangements. Transfer of resources is effected through three main channels: (1) Statutory transfers through the Finance Commission; (2) Plan transfers through the Planning Commission; and (3) 'Discretionary' transfers by Central Ministries for various purposes (mainly for Centrally sponsored schemes). Apart from these direct transfers, resources also flow to States indirectly through (a) establishment/expansion of

Central public sector enterprises, and (b) distribution of credit by financial institutions under the control of the Central Government. The indirect transfers do not form part of the present study.

TRANSFER OF RESOURCES THROUGH THE FINANCE COMMISSION

Although the Constitution provides for Central financial transfers, it does not indicate either the share of the States or the principle of allocation among the States of the divisible taxes between the Centre and the States; the Constitution has consciously avoided permanent formulae in this regard in view of the expected changes in spheres of taxation and public expenditure. This is left to be determined by the Finance Commission which is appointed by the President (under Article 280) every quinquennium, or earlier if necessary. Nine Finance Commissions have reported since the commencement of the Constitution. Their years of establishment, years of reporting, periods of awards, and the names of their chairmen are given in Appendix I.

Article 280(3) requires the Finance Commission to make recommendations to the President who is to lay the same under Article 281 before each House of Parliament. It is nowhere laid down in the Constitution that recommendations of the Commission shall be binding upon the Government of India. They are, therefore, non-justiciable. However, to safeguard the interests of the States in the Union taxes which are divisible, the Constitution provides (Article 274) that no bill or amendment which (i) varies the rate of tax in which the States are interested; (ii) affects the principles on which moneys are distributable or (iii) imposes any surcharge on any such tax for the purposes of the Union, shall be introduced or moved in Parliament except on the recommendation of the President. The Centre has generally accepted the major recommendations of the Finance Commissions though there are some instances of partial acceptance of such recommendations. For example, the Centre did not accept the entire set of recommendations of the Eighth Finance Commission relating to the first year (1984-85) of the five year period covered by it. The Centre held the view that, by the time the report was submitted (April 30, 1984), the Central and the State budgets had been passed and it was late to reopen the estimates. However, it was widely felt that this decision of the Government was in violation of the spirit of Article 280 of the Constitution.

Since the President is guided in all his decisions by the advice of the Central Council of Ministers (Article 74), the membership (Chairman and four members) of the Finance Commission and its terms of reference are determined by the Central Government. This is often criticised because the Centre itself is a party to the 'dispute' and the role of the Finance Commission is that of an arbiter. Nevertheless, the Finance Commissions have generally worked independently and some of them, particularly the recent ones, have been quite assertive.

The Finance Commission is a unique feature of the Indian Constitution having no parallel in the existing federal constitutions of the world. The Australian Commonwealth Grants Commission recommends special purpose grants to the claimant States, but the general grants are determined largely on the basis of negotiations at the political level. In India, the Finance Commission has replaced political bargaining by objective criteria in regard to devolution of resources, ensuring at the same time flexibility in revenue-sharing.

The primary function of a Finance Commission is to evolve a scheme of transfer of financial resources from the Centre to the States so as to ensure financial equilibrium at the two levels of Government during the period of its award and to design formulae to allocate resources so transferred among the States. This is by no means easy. The award of a Finance Commission generates considerable interest in issues pertaining to financial relations between the Centre and the States and the relative position of different States.

Broadly speaking, the procedure adopted by the Finance Commission is as follows. On the basis of the trends in the finances of Central and State Governments, it prepares estimates of revenues and expenditure for the period of its award and decides the total amount of transfers from the

Centre to the States so as to maintain the desired equilibrium in the finances of the two tiers of the Government. Thereafter, the total amount of transfers is broken down into devolution and grants-in-aid. This is followed by determination of separate principles of distribution of the shared taxes and grants-in-aid among the States. Transfer of resources from the Centre to the States is designed to correct vertical imbalances while the distribution of resources among the States (with wide differentials in fiscal capabilities and needs) aims at correcting horizontal imbalances.

The transfers routed through the Finance Commission pertain to sharing of certain Central taxes, and grants-in-aid of revenues of the States. In other words, although the taxation powers allocated to the Centre and the States are mutually exclusive, yet all the taxes and duties levied by the Centre are not meant entirely for the purposes of the Centre. In fact, revenues from certain taxes and duties leviable by the Centre are totally assigned to or shared with the States to supplement the revenues of the States in accordance with their needs. Thus, income tax is levied and collected by the Centre but the proceeds are shared mandatorily with the States. Similarly, excise duties are levied and collected by the Centre but their proceeds are shared permissively with the States. Articles 268 and 269 of the Constitution mention items of taxes and duties the proceeds of which are wholly assignable to the States.

Besides, Article 275(1) provides for annual grant-in-aid of the revenues to such States as may need assistance. The Centre is also required to give grants-in-aid to the States for the welfare of the Scheduled Tribes and for raising the level of administration in the Scheduled Areas and separately for Assam. These provisions allow flexibility necessary to adapt to changing circumstances but, inevitably, lead to a certain element of *ad hocism* in the awards of a Finance Commission.

Sharing of Income Tax

By virtue of entry 82 of List I of the Seventh Schedule of the Constitution, the Central Government is empowered to levy 'taxes on income other than agricultural income'. These are compulsorily shareable between the Centre and the States under Article 270(1) of the Constitution. However, the proceeds attributable to Union Territories, taxes payable in respect of Union emoluments, and corporation tax are kept out of the divisible pool in accordance with the provisions contained in clauses (2), (3) and (4) of Article 270. Similarly, the surcharge levied for purposes of the Union under Article 271 is also excluded from the divisible pool. The Finance Commission is required to make recommendations on the following matters pertaining to income tax: (1) The percentage of proceeds of income tax, net of cost of collection, to be assigned to the States; (2) the allocation of States' share among the States; and (3) the determination of the net proceeds attributable to the Union Territories.

Table 2 summarises the recommendations of various Finance Commissions regarding the distribution of income tax revenue between the Centre and the States and the principles followed for the distribution of States' share among themselves. The share of the States in the net proceeds of income tax has increased gradually ever since the recommendations of the First Finance Commission. It reached the level of 85 per cent with the recommendations of the Seventh Finance Commission, and this level has been retained by the two subsequent Finance Commissions. Centre's share in the proceeds of income tax is low at 15 per cent and it virtually acts as a collecting agency on behalf of the State Governments.

In their memoranda to the Finance Commission, the States suggest a variety of conflicting criteria for the distribution of their share of income tax among themselves. Each State suggests a formula which it considers will benefit it the most: the richer States emphasizing the 'collection factor' and the poorer States the 'backwardness factor'. Prior to the recommendations of the Eighth Finance Commission, population was the dominant factor in the distribution scheme. The

weightage given to population factor varied between 80 per cent to 90 per cent and that for 'contribution factor' between 10 per cent to 20 per cent.

TABLE 2. RECOMMENDATIONS OF VARIOUS FINANCE COMMISSIONS REGARDING INCOME TAX

(per cent)

Finance Commission and period of award	States' share in income tax	Distribution among the states *inter se* on the basis of		
		Population	Contribution	Backwardness factors
First (1952-57)	55	80	20	-
Second (1957-62)	60	90	10	-
Third (1962-66)	66	80	20	-
Fourth (1966-69)	75	80	20	-
Fifth (1969-74)	75	90	10	-
Sixth (1974-79)	80	90	10	-
Seventh (1979-84)	85	90	10	-
Eighth (1984-89)	85	22.5	10	67.5
Ninth (1990-95)*	85	22.5	10	67.5

* A separate report was submitted for the year 1989-90.
Sources: *Reports of Finance Commissions.*

Although the Eighth and the Ninth Finance Commissions retained the share of States in the proceeds of income tax at 85 per cent, they changed the formula for the distribution of State's share *inter se* drastically. The Eighth Finance Commission recommended the following formula: (1) 10 per cent of the net proceeds of income tax to be distributed among the States on the basis of assessment of income tax. (2) 90 per cent of the net proceeds to be distributed among the States on the following criteria: (i) 25 per cent on the basis of population in 1971; (ii) 25 per cent on the basis of inverse of per capita income of the State multiplied by 1971 population; and (iii) 50 per cent on the basis of distance of per capita income of the State from the highest per capita income State (i.e. Punjab) multiplied by the 1971 population of the concerned State. Use of the 1971 population, instead of the 1981 population, was dictated by the Presidential Order appointing the Commission (para 7). This was also true of the Ninth Finance Commission [Ninth Finance Commission, Second Report, Presidential Order para 6]. Probably, this was considered appropriate because, if some States had fared better in implementing the family planning programme between 1971 and 1981, adoption of the 1981 census figures might prove detrimental to the promotion of family planning.

The formula of the Ninth Finance Commission was as follows: (i) 10 per cent on the basis of contribution; (ii) 45 per cent on the basis of distance of per capita income of a State from that of the State with the highest per capita income multiplied by the 1971 population; (iii) 22.5 per cent on the basis of the population of the State in 1971; (iv) 11.25 per cent on the basis of a composite index of backwardness compiled by the Commission; and (v) 11.25 per cent on the basis of the inverse of per capita income multiplied by the population of the State in 1971.

The Eighth Finance Commission, for the first time, gave a certain weight to 'backwardness' of a State in the distribution of income tax between States. This is reflected in criteria (ii) and (iii) adopted by the Commission. However, it should be noted that this does not reduce the weight of population as much as to 22.5 per cent as shown in Table 2, because both (ii) and (iii) have an element of population in them. This is also true of the criteria (ii) and (v) adopted by the Ninth Finance Commission; only the criterion (iv) adopted by that Commission is based purely on 'backwardness' without an element of population. Nevertheless, the introduction of 'backwardness' as a criterion in the distribution of income tax was generally welcomed.

Corporation Tax

By virtue of entry 85 of List I, read with Article 270(4)(a), the receipts from corporation tax belong exclusively to the Central Government. In

1959, the scheme of company taxation was simplified. Prior to this, 'a portion of the income tax paid by a company before declaring the dividends was 'deemed' to have been paid by the shareholders'. This portion was treated as income tax, and not as corporation tax. It was therefore a part of the divisible pool. In view of the complications involved in this procedure, the entire income tax paid by companies was defined, in 1959, as Corporation Tax, and therefore was left out of the divisible pool. [Sarkaria Commission 1988, Part I, paras 10.6.07 and 10.6.08]. Ever since, States have been pressing for the inclusion of corporation tax in the divisible pool, particularly so in view of its buoyant revenue. In view of the explicit Constitutional provision precluding corporation tax being shareable with the States, the Finance Commissions have gradually increased the share of States in the income tax (Table 2). Since, at present, 85 per cent of the net proceeds of income tax are assigned to the States, the Centre seems to be losing interest in increasing receipts from income tax. For instance, the share of personal income tax in Central tax collection has fallen from 18.7 per cent in 1960-61 to an estimated 9.8 per cent for the year 1990-91 [Sury, 1991, p. 7].

Commenting, the Sarkaria Commission said: "It is a fundamental principle of taxation that the taxing authority should have interest in its proceeds. In order to maintain this principle and giving a more meaningful choice to the Union among fiscal alternatives, it is necessary to enlarge the base of devolution to the States but with a lower percentage share in individual taxes. This can be done by bringing into the divisible pool a major Union tax but still keeping a sizeable revenue source for exclusive utilisation by the Union" [Sarkaria Commission 1988, Part I, para 10.6.15]. Specifically, Sarkaria Commission recommended that the net proceeds of corporation tax may be made permissibly shareable with the States through an appropriate amendment of the Constitution. Simultaneously, it made it clear that in the event of the inclusion of corporation tax in the divisible pool, necessary adjustments will have to be made by suitably lowering the shares of States in income tax and Central excise duties. Some State Governments have also argued on these lines. For example, the Government of Maharashtra suggested to the Ninth Finance Commission that the share of the States in income tax could be reduced to 75 per cent provided 20 per cent of the receipts from corporation tax are assigned to the States. The Ninth Finance Commission, however, did not examine the question of corporation tax because it was not referred to it by the President. Clearly, the President must some day refer the matter to the Finance Commission.

Surcharge on Income Tax

Article 271 of the Constitution provides for the levy of a surcharge on income tax wholly for the purposes of the Centre. Surcharge was levied in 1951 and continued uninterrupted (albeit with different nomenclatures like special surcharge, additional surcharge, etc.). Following the recommendations of the Eighth Finance Commission, it was withdrawn in 1985-86, but was reintroduced in 1987-88 for drought purposes and replaced by an employment surcharge in 1989-90. In fact, surcharge on income tax has become a permanent feature much against the spirit of the Constitutional provision. Instead of meeting any special expenditure requirement, the surcharge is a regular source of revenue for the Centre. States have all along pressed for the inclusion of surcharge in the divisible pool and pleaded before successive Finance Commissions for the same. However, at a conference of the Chief Ministers held in New Delhi on May 18-19, 1979, the Prime Minister turned down the demand of the States for making surcharge shareable on the ground that any change in this regard would be detrimental to the interest of weaker States. The Sarkaria Commission was firmly of the view that the surcharge on income tax should not be levied by the Central Government except for a specified purpose and for a strictly limited period only. The Eighth and the Ninth Finance Commissions opined that a surcharge continued indefinitely could be regarded as additional income tax and, therefore, shareable with the States. Thus, although the explicit Constitutional provision favours the Centre, the continuous levying of surcharge is an irritant in Centre-State relations.

Another point of controversy pertains to the receipts from 'penalties' and 'interest recoveries' under the head 'miscellaneous receipts'. The

Eighth Finance Commission was of the view that such receipts should form part of the divisible pool of income tax. Unfortunately, the Centre did not accept this recommendation, maintaining that interest and penalties, though payable under the Income Tax Act, are distinct from income tax. The Ninth Finance Commission disagreed and cited several judgements of the Supreme Court to prove that there was no essential difference between tax and penalties related to it. In most European countries fines and penalties associated with a tax are part of the receipts from that tax. 'Receipts from fines and penalties paid for infringement of regulations identified as relating to a particular tax and interest on payments overdue in respect of a particular tax are recorded together with receipts from that tax' [OECD, 1988, p. 38]. The stand taken by the Central Government in this regard is untenable. If expenditure on collection are deducted to arrive at the net tax receipts, 'penalties' and 'interest recoveries' for failure to pay in time must be added to the net tax receipts.

Sharing of Excise Revenue

Excise duties, levied by the Centre under Entry 84 of List I, belong to the category of taxes which may be divided between the Centre and the States (Article 272) and fall within the purview of the Finance Commission [Article 280(3)(a)]. The sharing of excise duties is permissive and therefore different from the compulsory assignment to the States of the whole proceeds of taxes under Article 269 and compulsory sharing of the proceeds of income tax under Article 270. It is for the Parliament to decide whether the States should at all be given such a share and in taking this decision it may consider the recommendations of the Finance Commission made in this regard. Successive Finance Commissions have taken the view that permissive sharing, contemplated under Article 272, is not only justified but even necessary in view of the growing financial needs of the States for developmental and other essential services. Therefore, ever since April 1, 1952, the States have been getting a share of the proceeds of Central excises. In fact, successive Finance Commissions have increasingly relied upon excise duties in their schemes of revenue transfers with the result that these duties find an important place in the revenue accruals of the State Governments. Understandably, there is near unanimity among the States to press for a higher share of excise revenue. Successive Finance Commissions, paying due regard to the requirements of the States on the one hand and the needs of the Centre on the other, have evolved their own sharing schemes considering the overall transfer of resources from the Centre to the States.

Determination of States' Share

The First Finance Commission recommended distribution of 40 per cent of the excise revenue from three commodities (tobacco, matches, and vegetable products) among the States in proportion to their population. The particular commodities were chosen on the ground, that they (a) were of common and widespread consumption, (b) yielded a sizeable revenue, and (c) possessed reasonable stability of yield. However, a number of States urged upon the Second Finance Commission to bring all excise duties under the distribution scheme. The Commission did not accept such a sweeping suggestion but increased the number of commodities from three to eight, namely, tobacco, matches, vegetable products, sugar, coffee, tea, paper, and vegetable non-essential oils but reduced the share of States from 40 per cent to 25 per cent. On balance, each State received a larger sum from this source than before.

The States again pleaded before the Third Finance Commission for inclusion of all excisable commodities in the distributable pool arguing that the expanding coverage of Central excises and their increasing incidence had adversely affected the revenue potential of sales tax. Accepting in principle the States' demand, the Commission remarked: 'The viability of the States could best be secured by a larger devolution of the Union excise duties and this should be effected by providing for the participation of the States, by conventions, in the proceeds of all Union excises. It would give a great deal of psychological satisfaction to the States and dissipate any suspicion that the Union is pursuing a policy of excessive centralisation of resources' [Finance Commission, 1961, para 44]. In fact, the

Commission recommended 20 per cent of the excise revenue from commodities which each yielded in 1960-61 revenue of Rs 50 lakh or more. The number of such commodities was 35.

The States pursued their case before the Fourth Finance Commission and accepting the States' view, the Commission recommended the sharing of the proceeds of all excise duties between the Centre and the States in the ratio of 80:20. The Fifth and Sixth Finance Commissions carried forward these recommendations. But, the Seventh Finance Commission drastically increased the share of States in excise duties from 20 per cent to 40 per cent, making them the most important shareable tax between the Centre and the States. In doing so, the Commission was guided by the objective of leaving as many of the less affluent States as possible with a surplus on revenue account. It preferred bulk of fiscal transfers by way of tax shares than grants-in-aid. The Eighth Finance Commission further enhanced the share of States in excise duties to 45 per cent, out of which 5 per cent was set aside for distribution among those States which continued to have deficits even after the devolution of taxes and loans as recommended by it. The Ninth Finance Commission retained the share of States at 45 per cent for the quinquennium 1990-95. The underlying principle in this respect has been to enlarge States' share in a buoyant source of tax revenue of the Centre. As the States have persistently argued, the expansion in the range of commodities subject to excise duties and the increasing incidence of such duties has considerably reduced the scope for States' sales tax. Hence, it seems reasonable that the States are given a substantial share in a buoyant source of tax revenue such as the Central excises.

Distribution of States' Share Inter Se

'While there was near unanimity among the States in demanding an increase in the share of Union excise duties, there were naturally wide divergences in their approach to the principles of determination of the relative shares of the States in the divisible pool. Each State was inclined to put forward a formula that would favour it most' [Finance Commission, 1973, Ch. 4, para 6]. The various criteria, often conflicting, suggested by the States, from time to time, include population, consumption of excisable commodities, collection of revenue, economic backwardness, relative financial weakness, sales tax collections and percentage of scheduled castes and scheduled tribes. No surprise that relatively industrialised States like Gujarat, and Maharashtra argue in favour of collection factor because bulk of the tax revenue originates there. Poorer States like Uttar Pradesh, Orissa, and Bihar want significant weightage for backwardness criterion while Madhya Pradesh and Rajasthan prefer high weightage for geographical area.

The First Finance Commission distributed the States' share of excise duties among the States on the basis of population. The Second Finance Commission also preferred distribution largely on the basis of population. The Third Finance Commission, while agreeing to population being the major factor, took into account also other factors like the relative financial weakness of the States, disparity in the levels of development, percentage of scheduled castes and tribes, and backward classes population. However, it did not specify the weightage assigned to different indices of economic backwardness.

The Fourth Finance Commission accepted population as a general measure of the needs of States and distributed 80 per cent of the States' share on the basis of population. The remaining 20 per cent was distributed on the basis of social and economic backwardness of the States which was assessed on the basis of the following factors: (a) per capita gross value of agricultural production; (b) per capita value added by manufacture; (c) percentage of workers (as defined in the Census) to the total population; (d) percentage of enrolment in classes I to V to the population in age group 6-11; (e) population per hospital bed; (f) percentage of rural population to total population; and (g) percentage of population of scheduled castes and tribes to total population. However, again, the Commission did not indicate the manner in which the several factors were to be combined.

The Fifth Finance Commission distributed 80 per cent of the States' share of excise duties on the basis of population and the remaining 20 per cent on the basis of socio-economic backwardness. Two-thirds of the 20 per cent was distributed

among States whose per capita income was below the average per capita income of all States in proportion to the shortfall of the States' per capita income from all States' average weighted by population of the respective States. The remaining one-third of the 20 per cent was distributed according to an integrated index of backwardness on the basis of the following six criteria: (a) population of the scheduled tribes; (b) number of factory workers per lakh of population; (c) net irrigated area per cultivator; (d) length of railway and surfaced roads per 100 sq. km; (e) ratio of the number of school going children as compared to those of school going age; and (f) number of hospital beds per 1,000 population.

The Sixth Finance Commission, after having considered the long list of indicators of backwardness suggested by the States, concluded: 'Even a cursory look at the list would show that most of the indicators put forward by the States refer either to characteristics that are themselves the causes of low per capita income or to characteristics that are direct or indirect consequences of low per capita income' [Finance Commission, 1973, Ch. 4, para 13]. It, therefore, adopted per capita income as the sole criterion in assessing the relative economic position of the States. This approach of the Commission was partly the result of the difficulty in assigning weightage among different indicators of economic backwardness. The Commission distributed 75 per cent of the States' share of excise duties on the basis of population and the remaining 25 per cent on the basis of economic backwardness. The distribution of weightage for backwardness was recommended in relation to the 'distance' of a State's per capita income from that of the State with the highest per capita income weighted by the 1971 population. Thus, the Sixth Finance Commission rejected the approach of the Fifth Finance Commission which had classified the States into two categories, rich and poor: States with per capita income above the national income being regarded rich and those below the average as poor. This, in the opinion of the Commission, affected most adversely those States whose per capita income was just above the dividing line.

The Seventh Finance Commission evolved its own overall indicators of backwardness, such as per capita income and the proportion of people below the poverty line, in preference to partial indicators like level of schooling, health services, scheduled castes and tribes population, road mileage etc., as adopted by some of the previous Commissions. It determined the shares of States in the divisible pool of excises by giving equal weights (i.e. 25 per cent each) to the following four factors: (a) population; (b) inverse of per capita State Domestic Product (SDP); (c) the percentage of the poor in each State; and (d) a revenue equalization formula evolved by the Commission. Thus, the Seventh Finance Commission not only significantly enhanced the share of States in excise proceeds but also drastically changed the principles of allocation of excise revenue among the States.

For (b), the Commission used the per capita SDP in a comparable series at State current prices by adopting the annual average for the triennial 1973-76. Direct cognisance of the poor in (c) was a particular innovation of the Seventh Finance Commission. Unfortunately, the computational procedure employed by the Commission to estimate the percentage of the poor in each State was severely criticised by Dandekar and shown to be faulty and erroneous [Dandekar, 1979, Pp. 233-236]. As much as this author can judge, Dandekar's criticism has been accepted though, of course, there was no way to correct the report of a Finance Commission once it was submitted.

For the revenue equalisation principle, the per capita revenue potential of each State with reference to the average per capita SDP for the triennial 1973-76 was computed. The per capita average of each State's own tax and non-tax revenue for 1975-76 and 1976-77 were regressed on the average per capita income of the States to derive the estimated values of per capita revenue of each State. The distance of the per capita revenue thus estimated for each State from the maximum estimated per capita revenue among all the States (i.e. Punjab) was multiplied by the estimated population of the State as on March 1, 1976. The percentage of the product of the distance of the per capita revenue so estimated from that of Punjab and the population for each State in the total of these products for all the States gave the share of each State in the component of the divisible pool based on revenue equalization formula. The adoption of this formula was a

recognition of the fact that States which are less favourably placed in regard to their resource potential are helped to take steps for the betterment of the people living in those States.

The Eighth Finance Commission was guided by three over-riding considerations in this matter: (1) that the formula should be progressive in the sense that it should allocate a larger share to those States which have relatively lower per capita incomes, or, which are otherwise backward and financially weak; (2) the formula should be simple; and (3) firm and reliable data should be available for applying the formula. Based on these considerations, the Commission recommended the distribution of States' share (45 per cent) of Central excises among the States in the following manner: (a) 40 per cent on the same basis as recommended by it for the distribution of 90 per cent of the States' share in income tax, namely: (i) one-fourth (i.e. 25 per cent) on the basis of 1971 population; (ii) one-fourth (i.e. 25 per cent) on the basis of inverse of per capita income of the State multiplied by 1971 population; (iii) the remaining 50 per cent on the basis of distance of per capita income of the State from that of the State which has the highest per capita income (i.e. Punjab) (b) The remaining 5 per cent was set aside for distribution among the States which had deficits after taking into account their shares from the devolution of all taxes and duties.

The Ninth Finance Commission retained the share of States in excise duties at 45 per cent and recommended its distribution among the States on the following bases: (i) 25 per cent on the basis of 1971 population; (ii) 12.5 per cent on the basis of Income Adjusted Total Population; (iii) 12.5 per cent on the basis of the index of backwardness compiled by the Commission; (iv) 33.5 per cent on the basis of distance of per capita income of a State from that of the State having the highest per capita income (i.e. Punjab); (v) the remaining 16.5 per cent to be distributed among the States with deficits, after taking into account their shares from various taxes and duties.

Table 3 summarises the recommendations of successive Finance Commissions regarding the distribution of excise revenue between the Centre and the States and the bases for allocating the States' share *inter se*.

TABLE 3: RECOMMENDATIONS OF FINANCE COMMISSIONS REGARDING DISTRIBUTION OF CENTRAL EXCISE DUTIES

(per cent)

Finance Commission	Coverage (Number of commodities)	States' share of excise duties	Bases of distribution among the States	
			Population	Other factors with brief description
First	3*	40	100	---
Second	8**	25	90	10 (adjustments)
Third	35***	20	Major factor	financial weakness, disparities in development level, and scheduled castes population.
Fourth	All	20	80	20 (Seven tests of relative economic and social backwardness)
Fifth	All	20	80	20 (Relative backwardness in socio-economic development)
Sixth	All	20	75	25 (Economic backwardness based on 'distance' factor)
Seventh	All	40	25	75 (Inverse of SDP, percentage of poor in each State, and revenue equalization)
Eighth	All	45@	25	75 (Inverse of per capita income and 'distance' factor)
Ninth	All	45	25	75 (Various indices of economic backwardness)

* Tobacco, matches, and vegetable products

** Tobacco, matches, vegetable products, sugar, coffee, tea, paper and vegetable non-essential oils.

*** Commodities (except motor spirit) which each yielded revenue of Rs 50 lakh or more in 1960-61.

@ 5 per cent was earmarked for distribution among the States which suffered deficits after claiming shares from the devolution of all taxes and duties.

Sources: *Reports of Finance Commissions*.

Special Duties of Excise

Special duties are in the form of surcharges on basic duties and were levied on certain goods for the first time in 1963 in the wake of the Chinese aggression. These were earmarked exclusively for purposes of the Centre and were not shareable with the States. States have all along contended that the proceeds of special excises should also be shared with them. While the Constitution specifically lays down, in Article 271, that surcharges on taxes falling under Articles 269 (estate duty, etc.) and 270 (income tax) are exclusively for the use of the Centre, there is no such provision for surcharges on excise duties. Their sharing is disallowed only in the Finance Acts and this can always be reviewed by Parliament, particularly in the light of the recommendations of Finance Commissions in this regard.

The Fourth Finance Commission had taken the view that it was open to it to suggest that proceeds of special duties of excise should also be made shareable with the States. However, on practical considerations, it did not think it desirable to bring the proceeds of special duties of excise within the sharing scheme. The Commission, however, suggested that the recourse to special excises by the Central Government should be the exception rather than the rule. The Fifth Finance Commission found no justification to exclude special duties of excise from the divisible pool and recommended their inclusion in the scheme of sharing of excise revenue from 1972-73 onwards. As a consequence, special duties of excise got merged with basic duties from April 1, 1972.

In the meantime, the Central Government devised another method to augment excise revenue exclusively for its own purpose. It had introduced regulatory duties of excise in 1961 for the purpose of empowering the Executive to vary rates of duties on any item within certain limits. This provision had remained dormant till 1970-71 because revenue from regulatory duties was either nil or negligible during all these years and therefore did not attract the attention of either the States or the Finance Commissions. The situation, however, changed significantly when, in the wake of large influx of refugees from Bangladesh and conflict with Pakistan, the Central Government imposed under the Finance Act of 1971 regulatory duties of excise on such items as steel, iron and steel products, copper, zinc, and aluminium. Furthermore, the regulatory duties were replaced by auxiliary duties (i.e., special duties) under the Finance Act, 1973 and it was specifically laid down in the Act that the auxiliary duties were for the purposes of the Centre, meaning thereby that proceeds therefrom would not be shared with the States.

The States resented this as it would lead to the Centre raising additional revenue increasingly through auxiliary duties rather than the shareable basic duties. Upholding the States' view, the Sixth Finance Commission recommended the merger of revenue from auxiliary duties in the divisible pool from 1976-77 onwards. Consequently, all auxiliary duties of excise were merged with the basic duties under the Finance Act of 1977. To forestall any future ambiguity as regards division of revenue from special duties of excise between the Centre and the States, the Seventh Finance Commission categorically stated that revenue from excise duties, whether they are designated special or regulatory or by any other name, should be included in the distributable pool. The Eighth and the Ninth Finance Commissions endorsed this view and recommended that the divisible pool should include all excise duties including special excise duties but excluding earmarked cesses and duties collected under the Additional Duties of Excise (Textiles and Textile Articles) Act, 1978. Of late, the States have insisted for the inclusion of earmarked cesses, and the additional excise duties under the Act of 1978, in the divisible pool. There are cesses on commodities which bear no excise duty like iron ore, and coal. Then there are items which are subject to regular excise duties along with cesses like tea, sugar, and paper. Additional excise duties on textiles are also a kind of earmarked levy meant to finance the controlled cloth and Janata Cloth Schemes. Like surcharge on income tax, cesses have also become permanent features of excise taxation, and since they reduce the scope for regular excise duties, the States want their merger in the divisible pool. The Eighth and the Ninth Finance Commissions examined the question of inclusion of cesses in the divisible pool but were content to observe that

their number should be kept to the minimum.

Another contentious issue pertains to frequent increases in administered prices by the Centre. The States desire that the Centre should raise resources by increasing excise duties instead of administered prices so that they may share the resources so raised. The Eighth Finance Commission distinguished between an increase in administered prices to meet increase in cost of production and for revenue-raising. If revenue-raising is the objective, then excise duties should be preferred. This view was endorsed by the Ninth Finance Commission.

Additional Duties of Excise

In 1956, at a meeting of the National Development Council (NDC), the Centre and the States had entered into a voluntary agreement to replace sales tax on textiles, tobacco, and sugar by additional duties of excise and to distribute revenues derived therefrom among the States in accordance with the formula to be prescribed by the Finance Commission. The agreement provided also that the share accruing to each State shall not be in any case less than its revenue from sales tax on these goods in 1956-57. This decision was implemented through the Additional Duties of Excise (Goods of Special Importance) Act, 1957. The Act does not debar States from the levy of sales tax on the specified commodities, but it does provide that if in any year any State levies and collects a tax on the sale or purchase of such commodities, no sum shall be paid to that State in that year by way of share out of the net proceeds of the additional duties of excise, unless the Central Government by special order decides otherwise. The commodities covered under the scheme, namely, textiles, tobacco, and sugar were declared goods of special importance in the inter-State trade so that no State could find it worthwhile to opt out of the voluntary agreement not to impose sales tax on these goods.

Internal as well as inter-State sales tax on goods of special importance is governed by the Central Sales Tax Act, 1956. Section 14 of this Act describes the goods of special importance in inter-State trade and Section 15 prescribes the rate thereon. The present rate of Central Sales tax is 4 per cent. Also, sales tax on these commodities can be levied at only one stage and the local sales tax is to be refunded if such goods subsequently become subject to inter-State sales tax.

Issues Before the Finance Commission

In distributing proceeds of additional duties of excise among the States, the first issue before the Second Finance Commission, which was the first to deal with this problem, was to determine the yield in 1956-57 from sales tax on the commodities subject to additional excise duties for purposes of guaranteeing to the concerned States the amount so determined. The assurances of the guaranteed amounts in the original agreement was an indication of the logic that, in the distribution of the net proceeds, the principle of compensation was to be followed. In other words, each State should get almost the same amount as it would have got, had sales taxes on these commodities been in operation with the same order of incidence as the additional excise duties. The Commission worked out its estimates of yield from sales tax in 1956-57 primarily based on consumption estimates and figures of collection of sales tax obtained from each State for the years 1954-55 to 1956-57. Later Finance Commissions, upto the Ninth Finance Commission did not consider it feasible, in view of the lapse in time, to reassess the likely yield of sales tax in 1956-57 and to redetermine the guaranteed amount. Instead, they accepted the estimates of the Second Finance Commission with adjustment wherever necessary.

The second issue was whether the guaranteed amounts should first be set apart from the net proceeds and the balance then distributed among the States or to distribute the entire net proceeds on appropriate principles subject to the overriding proviso that no State should get less than the guaranteed amount. The question was first raised by the Sixth Finance Commission. Commenting, the Commission said: 'The earlier Commissions have preferred the first alternative. They presumably felt that unless the guaranteed amounts were first set apart and the balance alone distributed among the States, there was the risk of the share of some of the States falling short of

the guaranteed amount. However well founded this apprehension may have been earlier, we are convinced that there is now absolutely no risk of the share of any State not coming up to the guaranteed amount. ... We, therefore, feel there is no need to set apart the guaranteed amounts and distribute the balance alone among States.' In fact, the Commission felt: 'The initial reservation of guaranteed amounts confer an unintended advantage on certain States and introduces an avoidable element of distortion in the scheme of distribution of additional excise duties' [Finance Commission, 1973, Ch. 5, para 7].

The Seventh Finance Commission took the same view and added that, if the guaranteed amounts were first set apart, 'there is no doubt that some States would receive in the period covered by our Report shares slightly larger than the shares they would receive if the guaranteed amounts were not so set apart. While it is true that under the NDC resolution earlier agreed to, a State is entitled to have a share which should not be less than the guaranteed amount, the agreement does not assure to any State any extra benefit what it would receive were the guaranteed amount first set apart' [Finance Commission, 1978, Ch. 6, para 6]. The Eighth and the Ninth Finance Commissions also did not set apart the guaranteed amount in their formulae.

The third issue relates to the basis of distribution of additional excise duties among the States. It is widely recognised that State-wise figures of consumption of the commodities on which additional excise duties are levied accord the best reflection of the potential loss of revenue sustained by States' surrender of authority to levy sales tax on them. Finance Commissions have differed in adopting methods to assess relative levels of consumption of these commodities in different States. The divergence of opinion on this account has been mainly due to paucity of reliable data on State-wise consumption of these commodities.

Thus, the Second Finance Commission recommended the distribution of additional excise duties on the basis of the then available consumption figures with population as a correctional factor. It adopted elaborate procedures for working out estimates of yield (i.e., the guaranteed amount for the year 1956-57). These were primarily based on consumption estimates and figures of collection of sales tax obtained from each State for the years 1954-55 to 1956-57. The Third Finance Commission considered it equitable to distribute the collections in excess of guaranteed amounts partly on the basis of the percentage increase in the collection of sales tax in each State since the year 1957-58 and partly on the basis of population. It did not, however, indicate the relative weightage given to these factors. The Fourth Finance Commission felt that figures of collections of all sales taxes in a State were a more direct indicator of the contribution made by each State to the divisible surplus than population. Abandoning the population factor altogether, it recommended the distribution of the balance over the total of guaranteed amounts on the basis of the proportion of sales tax revenue realised in each State to the total sales tax collections in all the States taken together. The Fifth Finance Commission reverted back to the Third Finance Commission's formula and recommended distribution of additional excise duties giving equal weightage to both sales tax collections and population.

The Sixth Finance Commission rejected sales tax collections outright as a possible indirect indicator of the level of consumption of textiles, sugar, and tobacco in different States and instead argued for a combination of population and State Domestic Product: 'Of the various possible indirect indicators of levels of consumption (of these commodities) we have no hesitation in rejecting sales tax collections as of any relevance at all. As recognised by the Fifth Finance Commission, sales tax is applicable to a wide range of commodities comprising luxuries, semi-luxuries, raw materials, intermediate goods and the like. Sales tax revenue derived from these commodities may be a measure of the tax effort of the State Governments but it does not provide even an indirect clue to the levels of consumption of textiles, sugar, and tobacco on which additional excise duties are being levied in lieu of sales tax ... There cannot be serious room for argument that consumption (of these commodities) is directly related to levels of income. Latest available data on State Domestic Product may, therefore, be

taken to provide a broad indication of the likely consumption of these commodities. ... Having regard to these considerations, we feel that population and the average of State Domestic Product for the three years 1967-68 to 1969-70 should be taken together as providing reasonable basis for assessment of the levels of consumption, population being given considerably higher weightage.' Further, the Commission argued for some weightage to be given to production of the particular commodities in the State: 'It is arguable that if the States had not surrendered their power to levy sales tax on textiles, sugar and tobacco, they would have also had the authority to levy sales tax on these commodities sold in the course of inter-State transactions. ... Sales tax leviable on these three commodities 'exported' to other States would, however, normally be subject to a ceiling of three per cent which is the rate applicable under the Central Sales Tax Act to inter-State sales to recognised dealers and Government Departments.... In view of this, while production of these commodities in different States has to be given a measure of weightage, the weightage should however be comparatively small ... Having regard to all the considerations set about above, we feel that by far the most equitable basis for distribution of additional excise duties would be to allocate the proceeds of additional excise duties on the basis of population, State Domestic Product at State current prices and production in the ratio of 70:20:10' [Finance Commission, 1973, Ch. 5, paras 11-12-13].

The Seventh Finance Commission examined in detail the available statistics of State-wise consumption of the commodities to which additional excise duties are applicable. In particular, it studied the suitability of household consumer expenditure data of the National Sample Survey (NSS) for adoption as a measure of the consumption of these articles in each State. However, in view of the various limitations of NSS data, the Commission did not find it proper to use these data for estimating the consumption in each State of the articles subject to additional excise duties. For instance, the NSS data related to the year 1972-73 and was considered outdated for the Commission's period of award, i.e., 1979-84. Further, while NSS data covered only household expenditure, the Commission was interested in non-household consumption expenditure as well.

Making a departure from the approach of the earlier Finance Commissions, the Seventh Finance Commission adopted different formulae for distribution of additional excise duties on different commodities. In the case of sugar, it recommended the distribution of the net proceeds of additional duties among the States in proportion to the despatches of sugar to each of the States averaged for three years ending with 1976-77. Statistics of despatches of sugar to each State, obtained from the Department of Food of the Government of India, were taken as a fair approximation of consumption of sugar in each State. In the case of textiles and tobacco, the average per capita SDP of each State for the 3 years ending 1975-76 was multiplied by the population of the State according to the 1971 census and the percentage shares of this product of each State in the corresponding all-States' total figure were worked out. We may note that Seventh Finance Commission made a specific suggestion to the Central Government regarding collection of suitable statistics for reliable estimates of consumption of these articles in each State for the benefit of future Finance Commissions.

The Eighth Finance Commission also could not obtain reliable estimates of consumption of these commodities. It, therefore, recommended the distribution of additional duties of excise on all the three commodities (viz., sugar, textiles, and tobacco) by giving equal weightage to SDP and 1971 population.

We have already noted that the Ninth Finance Commission had used the 1971 population for distributing the income tax. This was in accordance with para 6 of the Presidential Order appointing the Commission. However, in distributing the Additional Duties of Excise, The Commission had second thoughts: 'We have reconsidered at length whether for calculating the shares of the States in the net proceeds of Additional Duties of Excise, the 1971 or 1981 census figures of population should be used. Paragraph 6 of the terms of reference, no doubt, lays down that this Commission should adopt the population of 1971 in all cases where population is regarded

as a factor for determination of devolution of taxes and duties and grants-in-aid. But the question is whether distribution of Additional Duties of Excise is really devolution or grant. The fact that the proceeds of Additional Excise Duties are distributed only in pursuance of a tax rental arrangement between the Centre and the States (which has its origin in the National Development Council meeting of 1956) would clearly imply that this distribution cannot be treated as devolution or grant-in-aid in the sense that these terms are normally understood. The terms of reference would, therefore, not bind us to use the 1971 population for computing the States' share of Additional Excise Duties. But for the tax rental arrangement, the States would have been collecting Sales Tax on the current consumption of the relevant commodities. Since population is being used only as a proxy for consumption alongwith SDP, we consider it as only logical that any criterion which links the shares of the States nearest to the consumption of the relevant items in the individual States should be preferred. ... We have, therefore, used the New Series of comparable estimates of SDP averaged for three years 1982-3 to 1984-85, along with the 1981 census figures of population in determining the shares of the States *inter se* in the net proceeds of Additional Duties of Excise' [Finance Commission, 1989, paras 5.18-5.19].

The rationale of the scheme of replacing sales tax by additional duties of excise lies in minimising tax evasion by levying the tax at first point and to save industry, trade, and consumers from the administrative complexities involved in the collection and payment of sales tax. While suggesting measures to fight tax evasion, the Wanchoo Committee observed: 'The best way to get over the problem posed by the existing sales tax systems would be to replace sales tax levy on various commodities, as far as possible, by additional duties of excise, but in the selection of commodities, care should be taken to minimise the cascading effect on prices' [Wanchoo Committee, 1971, para 2.134].

While the business community has demanded the extension of this scheme to other commodities, the States have generally remained disinclined in this regard, fearing that such a move would erode their fiscal autonomy. Some State Governments have expressed dissatisfaction with the existing scheme, arguing that the revenue potential of additional excise duties has not been fully exploited by the Centre. For instance, the increase in sales tax revenue between 1960-61 and 1976-77 was thirteen times, while the increase in revenue from additional excise duties was only seven times [Jha Committee, 1978, Part II, Para 4.30, footnote].

The Fifth Finance Commission, after extensive consultations with the Central and State Governments and representatives of trade and industry, concluded: 'The rationale of the present scheme of additional excises in lieu of sales taxes and the advantages which it was expected to bring, hold good even now. But although a scheme of uniform levy of excise duties in lieu of sales tax at varying rates on commodities of common consumption might have its own advantages, we consider that the full utility of such a scheme cannot be realised unless the arrangements could be extended to other important commodities also' [Finance Commission, 1969, para 5.14]. The Commission stressed the need for understanding and cooperation between the Centre and the States for the success of the scheme.

Decisions of NDC

In view of the complaints of the States, the whole issue was reconsidered by the National Development Council (NDC) in its meeting held on December 28, 1970. The Council decided to continue the scheme with the following conditions: (a) that the incidence of additional duties would be stepped up to 10.8 per cent of the value of clearances within a period of two or three years, (b) that a ratio of 2:1 between basic and additional excise duties would be achieved and maintained, (c) that specific duties would be converted into ad valorem duties except in regard to unmanufactured tobacco. It was also agreed that a Standing Review Committee, consisting of representatives of the Central and the State Governments with Economic Adviser, Planning Commission, as Convener, would be set up and the same would meet at least once a year to review

the working of the new arrangement and make such recommendations as may be necessary for its further improvement.

As a follow up action, specific duties were replaced by ad valorem rates and significant enhancements were made in additional excise duties in the Central budgets for the three consecutive years 1971-72 to 1973-74.

The Seventh Finance Commission compiled statistical data to verify the implementation of the agreement reached in 1970 and found that additional excise duties as a percentage of the value of clearances stood at 8.66 in 1973-74 and thereafter came down to the figure of 6.82 in 1977-78 (R.E.). The corresponding percentages for basic duties (including special, regulatory and auxiliary duties in force from time to time) were 24.35 and 16.13 [Finance Commission, 1978, Ch. 6, para 16]. The Commission took note of the tardy progress made by the Government in implementing the agreement and attributed the discontent among the States partly to the lack of opportunity for full and frank discussions between the Central and State Governments and stressed in this context regular meetings of the Standing Review Committee which had not met even once by the time the Commission submitted its report.

The Committee met for the first time in February 1981 and appointed a sub-committee which recommended that the incidence of 10.8 per cent should be achieved in three stages: 8.5 per cent by 1984-85; 9.75 per cent by 1987-88; and 10.8 per cent by 1989-90. The Ninth Finance Commission was informed by the Union Finance Ministry that the incidence achieved by the end of 1988-89 was 10.7 per cent. The Commission hoped that the committed level of 10.8 per cent would be actually achieved by the end of 1989-90. In a significant move, the Commission recommended that during its award period (1990-95) if in any year the incidence of additional excise duties falls short of the level of 10.8 per cent of the value of clearances, the shortfall should be made good by the Centre by providing equivalent amount by way of grant-in-aid to be distributed amongst the States in the same manner as recommended for sharing the proceeds of additional excise duties.

TABLE 4. REVENUE FROM BASIC DUTIES AND ADDITIONAL DUTIES ON SUGAR, TEXTILES, AND TOBACCO, 1959-60 TO 1992-93

(Rs Crore)

Year	Basic duties	Additional duties	Ratio between basic & additional duties	Year	Basic duties	Additional duties	Ratio between basic & additional duties
1959-60	150.4	28.3	5.31:1	1975-76	600.0	223.4	2.68:1
1960-61	146.8	33.6	4.36:1	1976-77	655.6	257.1	2.55:1
1961-62	155.4	38.9	3.99:1	1977-78	699.3	267.3	2.61:1
1962-63	186.0	44.7	4.16:1	1978-79	714.5	335.6	2.13:1
1963-64	194.1	43.3	4.48:1	1979-80	831.3	347.6	2.39:1
1964-65	199.7	44.7	4.46:1	1980-81	870.3	394.5	2.21:1
1965-66	206.2	47.1	4.37:1	1981-82	939.8	485.3	1.94:1
1966-67	263.4	50.4	5.22:1	1982-83	890.0	496.3	1.79:1
1967-68	256.9	48.6	5.28:1	1983-84	1,068.9	719.6	1.48:1
1968-69	277.2	52.6	5.26:1	1984-85	1,042.8	810.8	1.28:1
1969-70	328.6	60.6	5.42:1	1985-86	1,124.0	945.7	1.19:1
1970-71	386.6	74.7	5.17:1	1986-87	1,322.8	1,111.5	1.19:1
1971-72	443.5	106.2	4.17:1	1987-88	1,413.0	1,147.2	1.23:1
1972-73	439.9	135.6	3.24:1	1988-89	1,571.5	1,276.3	1.23:1
1973-74	494.4	173.7	2.84:1	1989-90	1,800.4	1,474.8	1.22:1
1974-75	529.9	187.8	2.82:1	1990-91	1,871.2	1,490.4	1.25:1
				1991-92 (R.E.)	2,194.3	1,911.4	1.15:1
				1992-93 (B.E.)	2,405.4	2,077.4	1.16:1

Source: Compiled from Government of India, Ministry of Finance, *Explanatory Memorandum on the Budget of the Central Government/Receipts Budget* (various years).

As regards the ratio between basic duties and additional duties on sugar, textiles and tobacco, the trends over the period 1959-60 through 1992-93 are presented in Table 4. The overall ratio (the three commodities taken together) declined from 4.17:1 in 1971-72 to 2.21:1 in 1980-81, and is estimated at 1.16:1 in the 1992-93 budget. Thus, by 1981-82, the Centre fulfilled its obligation and achieved the 2:1 ratio. In fact, the ratio has further declined, rather sharply, since then.

Some States had suggested to the Seventh Finance Commission that total proceeds of basic duties and additional duties on the three commodities should be pooled and notionally divided in the ratio (2:1) agreed upon in 1970. Apparently, the actual ratio was more than the stipulated one when the suggestion was made, and now since the actual is less than the stipulated ratio, the suggestion has lost its validity. The merger issue was taken up as a tax simplification measure by the Long Term Fiscal Policy announced in 1985, which observed: 'Merger of additional excise in lieu of sales tax with basic excise duties, though desirable, is not feasible for the present as it would require evolving a suitable formula for allocating a part of the excise duties on textiles, tobacco, and sugar for disbursement among the States. The matter will be referred to the next (Ninth) Finance Commission for determination of a suitable formula' [Long Term Fiscal Policy, 1985, para 6.5]. The Commission did not recommend the merger of additional excise duties with basic excise duties.

Tripathi Committee Recommendations

The scheme of additional excise duties was proposed to be extended to some more commodities in September 1980. At a conference of the Chief Ministers convened by the Centre on September 16-17 of that year, it was resolved to bring vanaspati and life-saving drugs under additional excise duties in lieu of sales tax. It was also decided to constitute a committee of Chief Ministers to consider what other items could be added to the list of additional excise duties. However, the non-Congress (I) States then (Kerala, Tamil Nadu, Tripura and West Bengal) did not agree with the resolution passed at the Chief Ministers' Conference. The matter was further examined at another conference of Chief Ministers held in February 1981 which recommended the appointment of an expert committee by the Central Government to look into this matter. The committee was appointed in December 1981 under the chairmanship of Mohan Lal Sukhadia on whose death Kamlapati Tripathi was named chairman in March 1982. The expert committee which submitted its report in January 1983 recommended the replacement of sales tax by additional excise duty on vanaspati, drugs and medicines, cement, paper and paper board, and petroleum products. The recommendation was considered in a conference of Chief Ministers held in November 1983. However, the six Chief Ministers of non-Congress (I) States (Andhra Pradesh, Jammu & Kashmir, Karnataka, Tamil Nadu, Tripura, and West Bengal) opposed the Centre's initiative to implement the recommendations. The recommendations of the Tripathi Committee were further discussed at a conference of Chief Ministers held in New Delhi in February 1989. No progress could however be made for implementing the recommendations.

The opposition of non-Congress (I) States was because of their belief that the scheme would erode their revenue position. But a close perusal of the recommendations of Tripathi Committee suggests that it had evolved elaborate formulae for protecting the financial interests of the States. In the case of three commodities, namely, paper and paper board, vanaspati, and drugs and medicines, it had suggested that the annual rate of growth of the amount to be collected by way of additional excise duty in lieu of sales tax should be related to the future annual growth rate of sales tax revenue of all the States. For petroleum products, and cement, which are substantially subject to administered prices, the Committee recommended and worked out linkages between the amount to be collected by way of additional excise duty from year to year and value of consumption on which normal sales tax would be leviable [Tripathi Committee, 1983, Ch. 8, paras

13 and 17]. In spite of these safeguards, some States did not agree. Sarkaria Commission spells out the reason: 'The State Governments, in view of the past experience, do not feel assured with the formulae suggested and that the recommendations made by the Tripathi Committee would be duly honoured. One State Government has mentioned that this has happened because the decisions of the National Development Council have no statutory backing and that the recommendations of the Tripathi Committee might meet with the same fate resulting in considerable loss to the State Governments' [Sarkaria Commission 1988, Part I, para 10.9.18]. Thus, an important tax reform became a casualty of the mistrust between the Centre and the State Governments.

Grant in Lieu of Railway Passenger Fare Tax

Article 269(1) lists the taxes and duties which can be levied and collected by the Centre but are to be assigned to the States. The intention is to place under the charge of the Centre the taxes and duties which have inter-State character and require uniformity in rate structure for the smooth conduct of business and trade throughout the country. Article 269(2) clarifies that the proceeds are to be assigned to the States within which the duty or tax is levied. Thus, the net proceeds of these taxes and duties, except for those attributable to the Union Territories, do not form part of the Consolidated Fund of India. The Finance Commission is required to formulate principles for distribution of the proceeds among the States. The concerned taxes and duties are listed in a subsequent section on 'Articles 268 and 269'.

Among these, the tax on railway passenger fares was levied for the first time in 1957. The Railway Board pleaded before the Railway Convention Committee (1960) of the Parliament that the tax had reduced the scope for raising passenger fares and, following the recommendation of the Committee, the tax was repealed and merged in the basic fares from April 1, 1961. Naturally, the States were unhappy on being deprived of a potentially elastic source of revenue. To compensate the States for the loss of revenue, the Government decided to pay annually a sum of Rs 12.50 crore for distribution among the States during the five year period 1961-62 to 1965-66. In pursuance of the recommendations of the Railway Convention Committee (1965), the amount was raised to Rs 16.25 crore per annum from 1966-67.

In the wake of the Bangladesh crisis, the tax on railway passenger fares was revived in 1971 and later again repealed on March 31, 1973. With the consent of the States, the proceeds of the tax were transferred to the Centre to meet the expenditure on Bangladesh refugees. However, the grant of Rs 16.25 crore continued to be paid uninterrupted and unchanged till it was raised to Rs 23.12 crore by the Railway Convention Committee (1980) and it remained at that level during the period 1980-81 to 1983-84. The same Committee also suggested that future increase in the quantum of grant could be considered on the basis of the recommendations of the Eighth Finance Commission. The Commission, on the basis of the total non-suburban passenger earnings in 1981-82 and the fact that the tax, when in operation, constituted roughly 10.7 per cent of the total fare structure, increased the amount drastically from Rs 23.12 crore to Rs 95 crore per annum during the period of its award (1984-89), though the terms of reference did not require it to make any such recommendation. The Sarkaria Commission (1988) suggested periodical review and suitable adjustments of such lumpsum grant on the recommendations of the Finance Commission.

Going beyond its terms of reference, the Ninth Finance Commission also examined the question of quantum of grant. Some States pleaded that the grant should be 10.7 per cent of the non-suburban railway passenger earnings in each of the year of its award (1990-95). After having examined the railway finances, the Commission concluded that calculation of the grant at 10.7 per cent would put too much burden on the railways, jeopardising its modernisation plans. According to the Railway Board, calculation of grant at 10.7 per cent would have meant a commitment of Rs 232 crore in 1988-89 [Finance Commission, 1988, para 8.21]. On these considerations, the

Ninth Finance Commission fixed the grant at a lumpsum amount of Rs 150 crore per annum for each year of the period 1990-95.

The more pertinent task of the Finance Commission is to formulate principles for the distribution of this grant among the States. The Second Finance Commission, which was the first to deal with this question, adopted actual passenger travel on the railways within each State as the basis for which it considered route length as the proxy. This formula was endorsed and continued by the subsequent Finance Commissions upto the Sixth. The Seventh Finance Commission changed the formula and distributed the grant in proportion to the non-suburban passenger earnings from traffic originating in each State. The Eighth, and the Ninth Finance Commissions endorsed the same formula.

Grants-in-Aid

Even after the transfer to the States of a share of divisible taxes, the resources of some of the States may remain inadequate to meet their needs. Therefore, the Constitution provides for grants-in-aid by the Centre to such States as are in need of assistance. Two types of grants are provided by the Centre to the States: the first under Article 275 which are routed through the Finance Commission, and the second under Article 282 which provides that the Centre or a State may make any grants for any public purpose. These grants, which are given at the discretion of the Government are different from the grants made under Article 275. They were originally intended to meet unforeseeable emergencies (like drought, famines, and other natural calamities) and were not envisaged as part of the normal Centre-State financial relations. For instance, Central grants to States to help settle persons displaced as a result of the partition of the country was a typical example of the purpose contemplated by Article 282. These grants, meant for emergency purposes, were kept outside the purview of the Finance Commission which otherwise was entrusted with all the major questions of Centre-State financial relations.

Article 280(3)(b) requires the Finance Commission to make recommendations as to the principles which should govern the grants-in-aid to States under Article 275(1). The First Finance Commission suggested the following: First, in determining the eligibility of a State for grants-in-aid, its budgetary needs would be an important criterion. In studying the budgetary needs of a State, receipts from shared Central taxes would be taken into account, adjustments would be made for unusual or non-recurring items of revenue and expenditure and due allowance would be made for failure to maximise tax effort or to economize expenditure. Second, grants-in-aid should help equalize the standards of basic social services in the various States. Third, grants-in-aid may be given to promote any beneficent service of primary importance in regard to which it is in the national interest to assist the less advanced States. Nevertheless, in practice, the Finance Commissions have distributed these grants, by and large, on the basis of budgetary needs of the States, i.e., to cover non-Plan gap on revenue account variously described as 'budgetary gap', 'financial need', 'revenue gap', 'fiscal needs', etc.

The first eight Finance Commissions confined themselves to the non-Plan revenue accounts of the States. They determined the grants equal to deficit of each State so that the non-Plan revenue accounts of all the States were balanced or left with a surplus every year. This was called the 'gap-filling approach' (or more appropriately 'net gap filling approach') meaning that the deficits on non-Plan revenue account which remained after tax devolution were covered through grants. The 'gap-filling' approach adopted by successive Finance Commissions is to some extent attributable to the terms of reference issued to them. The main disadvantage of this approach was that it encouraged wasteful expenditure and discouraged revenue efforts on the part of the States. Hence, the Ninth Finance Commission was asked to 'adopt a normative approach in assessing the receipts and expenditure on the revenue account of the States and the Centre and, in doing so, keep in view the special problems of each State, if any, and the special requirements of the Centre such as defence, security, debt servicing and other

committed expenditure or liabilities' [Finance Commission, 1989, para 4(i) of the Presidential Order].

Consequently, the Ninth Finance Commission assessed the fiscal performance of the governments on the basis of what ought to be rather than on what it actually is. Thus, the 'needs' and 'capacities' of different governments were assessed normatively and such normative assessments were used as the basis for determining the volume and pattern of federal transfers. The Commission emphasized that the normative approach would be applied to both the Centre and the States and that the assessment of revenues and expenditures would be done in a manner as to maintain incentives for greater revenue effort and economy in spending. However, considering the request of some State Governments, the application of normative norms by the Commission was moderated and spread over a period of years. Moreover, the Special Category States were kept out of the normative approach and actuals were used to project receipts and expenditures.

The adoption of normative approach generated considerable controversy among fiscal experts. Its soundness was questioned by no less a person than Justice Qureshi, a member of the Commission. In his note of dissent appended to the report of the Commission, he observed: 'Although the normative approach is in itself a very beneficial thing, there is a practical difficulty in its application. Normative standards can be applied to States easily and effectively, but they cannot be applied to the Centre with the same rigour. It is difficult to set normative standard to certain items, such as, defence expenditure, debts, etc. It would, therefore, always be the grouse of the States that the normative approach is applied only to the States and not to the Centre' [Finance Commission, 1989, para 6.1 of the note of dissent].

Another departure from the previous practice made by the Ninth Finance Commission was to take into account the total revenue account, that is, including Plan revenue account. It may be mentioned that the budgets of the Central and State Governments are divided into revenue budget and capital budget under provisions of Articles 112 and 202 of the Constitution, respectively. After the commencement of Five Year Plans, the revenue budgets of the governments came to be sub-divided into Plan and non-Plan . budgets, particularly, on the expenditure side. Traditionally, Plan side was considered by the Planning Commission and the non-Plan side by the Finance Commission. In fact, upto the Eight Finance Commission, the terms of reference specifically mentioned that the Commission shall take into account 'the requirements on revenue account of those States to meet the expenditure on administration and other *non-Plan* commitments and liabilities, ...' [Finance Commission, 1984, para 5(iv) of the Presidential Order]. In contrast, the terms of reference of the Ninth Finance Commission, while asking to 'adopt a normative approach in assessing the receipts and expenditure on revenue account' did not specifically restrict it to non-Plan expenditure. Taking note of this change, the Commission commented: 'If the Commission's labours are to result in a rapid movement towards the restoration of balance in the revenue budgets of the Centre and States, it becomes necessary to consider the revenue budget as a whole comprising the non-Plan and Plan parts. ... Our approach here is in keeping with the terms of reference and is in full conformity with the constitutional position regarding the scope of work of the Finance Commission. While thus determining the area of our work, we have kept in view the traditional and important role played by the Planning Commission and the arrangements that have been established, on the basis of consensus in the National Development Council, for financing the revenue and capital plans of the State in an integrated manner. We have attempted to work out an approach which, while enabling us to perform our legitimate constitutional role, would not prove detrimental to the planning process or to the role played by the Planning Commission in that process' [Finance Commission, 1989, para 2.11].

This was a major departure from the past practice and marked a turning point in the controversy regarding the role and authority of the

Finance Commission *versus* the Planning Commission or the scope of Article 275 *versus* Article 282. It may be useful to state the position of the Commission on the issues involved. This we do in Appendix II.

It is noteworthy that while a State cannot be denied a part of a shared Central tax even if it has no demonstrated financial need, grants are given upon genuine financial needs of the States. It is possible that even before tax devolution from the Centre some high-income States have surplus in their non-Plan revenue account. The Seventh Finance Commission identified Punjab, Haryana, Gujarat, Maharashtra, and Karnataka as such States [Finance Commission, 1978, Ch. 9, para 42]. Nevertheless, these States were given their shares in the divisible taxes and duties in accordance with the formulas prescribed by the Commission. However, no grants-in-aid of revenues were given to the States of Maharashtra, Gujarat, Haryana, and Karnataka by the Ninth Finance Commission in view of their sound revenue position. [Finance Commission, 1989, para 7.15, Table 4]. Thus, the relative weightage given to various items in the basket of transfers is of crucial importance to States considered individually. The item-wise examination of transfers is important because the various items included in the aggregate transfers are not alike and hence subject to different formulas of distribution meant to correct horizontal financial imbalances. This is different from the aggregate approach, discussed in a subsequent section on 'Size and Pattern of Transfers', which examines vertical financial imbalances and their adjustments.

TRANSFER OF RESOURCES THROUGH THE PLANNING COMMISSION

With the establishing of the Planning Commission in 1950, the Central Government invoked Article 282, mentioned earlier, for making grants to the States for plan purposes. Planning Commission makes an assessment of the existing resources of the individual States and the country as a whole and sets the objectives in various fields and formulates plans for development in the light of requirements of each State. Ever since the launching of the First Five Year Plan, these grants have occupied important place in Central financial transfers to the States.

Grants given under Article 282 are a subject-matter of controversy. Some experts feel that the Planning Commission is an unintended channel for transferring resources to the States because the Constitution envisages a pre-eminent role for the Finance Commission in dealing with problems of fiscal federalism; it does not provide for a Planning Commission and a National Development Council (NDC) with powers to allocate resources to the States. However, with the establishing of the Planning Commission, the role of the Finance Commission became restricted to non-Plan expenditure of States. Hence, it is often suggested that, for healthy intergovernmental financial relations, the Finance Commission should decide grants-in-aid to each State under Article 282 of the Constitution. The Planning Commission should assist the Finance Commission by drawing up a priority list of projects, their costs, locational feasibility and other technical matters. But, that would make the task of the Finance Commission even more difficult and it would have to be transformed from a quinquennial into a permanent body sitting side by side with the Planning Commission.

Are Plan Transfers Discretionary?

What is the basis for allocating Central assistance for State Plans? During the first three Five Year Plans and the three Annual Plans thereafter, the distribution of Central assistance was not based on any clear-cut principles, giving the Planning Commission considerable discretion in allocating funds. In view of the demand from the States for the adoption of a well-defined formula, the whole issue was discussed on the eve of the formulation of the Fourth Five Year Plan (1969-74). The deliberations resulted in the adoption of a formula which later became known as the Gadgil Formula (after the then Deputy Chairman of the Planning Commission, D. R. Gadgil). The formula, approved by the NDC, was as follows: (1) The requirements of Special Category States should first be met out of the total pool of Central assistance. (2) The balance of the assistance should be distributed among the

remaining 14 States on the basis of the following criteria: (i) 60 per cent on the basis of population; (ii) 10 per cent on the basis of per capita State income of those States, the per capita income of which is below the national level; (iii) 10 per cent on the basis of tax effort, determined on the basis of individual State's per capita tax receipts as percentage of the State's per capita income; i.e., in effect, total tax receipts as a proportion of the total income of the State; (iv) 10 per cent on the basis of major irrigation and power projects which were to continue during the Fourth Plan; and (v) 10 per cent for special problems of individual States.

Central Plan assistance during the Fourth and the Fifth Plans was distributed in accordance with the provisions of the Gadgil Formula. The adoption of the formula reduced the scope of discretion of Planning Commission and instead introduced objectivity and transparency in the allocation of Plan assistance to the States. Gadgil Formula was modified on the eve of the formulation of the Sixth Plan to make it more progressive for the benefit of economically backward States. For this purpose, the 10 per cent weightage given to ongoing irrigation and power projects in the original formula was dropped while the weightage to per capita income below the national average (backwardness factor) was increased from 10 per cent to 20 per cent (Table 5). The modified formula, approved by the NDC in 1980, was applied for the Sixth and the Seventh Plans.

Rivalry among the States for more Central assistance led to further modifications of the Gadgil Formula. Each State is naturally anxious to suggest a formula which best suits its interest. The Revised Gadgil Formula, meant for the Eighth Plan, was discussed and approved by the NDC at its meeting held on December 23-24, 1991. Under the Revised Formula, the weightage assigned to population factor was retained at 60 per cent. The weightage given to per capita income factor was increased from 20 per cent to 25 per cent. Out of this 25 per cent, 20 per cent would continue to be allocated to States with per capita income below the national level. The remaining 5 per cent would be allocated to all the States on distance method. The Revised Formula discarded the tax effort factor with 10 per cent weightage. Instead, a new factor 'performance' was introduced with 7.5 per cent weightage. It consists of tax effort, fiscal management, national priorities including population, literacy, female welfare programmes, and land reforms. The weightage given to special problems was reduced from 10 per cent to 7.5 per cent (Table 5). It is noteworthy that the element of discretion associated with funds earmarked for special problems was considerably reduced with the identification of the following seven special problem areas in the Revised Formula: coastal areas, special environmental issues, flood and drought prone areas, exceptionally sparse or thickly populated areas, special financial difficulties for achieving minimum reasonable Plan size, desert problems, and slums in urban areas.

TABLE 5 ORIGINAL, MODIFIED, AND REVISED GADGIL FORMULA FOR CENTRAL PLAN ASSISTANCE TO STATES

Criterion	Weight (per cent)		
	Original formula (Fourth and Fifth Plans)	Modified formula (Sixth and Seventh Plans)	Revised formula (Eighth Plan)
1. Population	60	60	60
2. Per capita income below the national average (deviation)	10	20	25*
3. Per capita tax efforts	10	10	-
4. Outlay on continuing irrigation and power projects	10	-	-
5. Performance	-	-	7.5
6. Special problems	10	10	7.5
Total	100	100	100

* 5 per cent to be allocated to all the States on distance method.

Sources: *Report of the Commission on Centre-State Relations Part I, 1988*, para 10.7.04, and decisions of NDC reported in the Press.

Undoubtedly, Plan transfers by the Planning Commission are made under a set of clearly laid out objective criteria approved by the NDC and subject to review by it. It would, therefore, be wrong to call Plan transfers as discretionary. Even in the case of 'other transfers' (for natural calamities, etc.) there are standardised procedures as recommended by the Seventh and the Eighth Finance Commissions [Sarkaria Commission 1988, Part I, para 10.9.63]. As the Sarkaria Commission observed, the controversy regarding statutory versus discretionary transfers was more theoretical than realistic in nature. The Commission said: 'The Plan and other transfers which are labelled 'discretionary' do not amount to subversion of the Constitutional scheme. They cannot be considered either unreasonable or discretionary in a literal sense as their allocation follows predetermined criteria, or is tied to meet specific requirements of the States. The large magnitude of Plan transfers should not pose any controversy in this regard as the framers of the Constitution could not anticipate the extent of development resource-needs under the Plans of the States. The significant growth of Central assistance to States for planned development is, indeed, a natural response to such needs. The crux of the matter is that the States' participation in the planning process should be such that the Plan transfers are treated by them as part of a commonly agreed programme for the deployment of the nation's resources' [Sarkaria Commission 1988, Part I, para 10.7.13]. It must, however, be noted that though Plan assistance to States is formula-based yet the total amount of such assistance to be transferred to the States each year is determined by the Centre.

Centrally Sponsored Schemes

A contentious issue related to Plan assistance pertains to the Centrally sponsored schemes. These schemes are sponsored by the Centre and implemented by the States with matching Central assistance. The Central Ministries concerned propose and formulate these schemes which are approved by the Planning Commission. The States execute these schemes under the technical guidance and supervision of the Centre which also issues guidelines regarding the contents, coverage, expenditure pattern, and staffing of such schemes. The assistance given for these schemes, on matching basis, is over and above the assistance given for State Plans and the provision for it is made in the budgets of the Central Ministries.

The States are generally unhappy with their inadequate involvement in the formulation of Centrally sponsored schemes which mainly pertain to subjects included in the State List. Centre's sponsoring of these schemes is also considered an intrusion into the State sphere. 'The intrusion is not, technically unconstitutional for it is protected by Article 282 but it is a question whether, with the help of financial carrot such intrusion is desirable and conducive to the growth of healthy federal relationship' [A.R.C., Study Team, 1968, vol. I, para 8.6]

The States have also complained against Centrally sponsored schemes on the ground that the system of matching grants involved in the schemes favours the richer States because they are better placed to provide matching funds to avail the Central assistance. Moreover, such schemes induce the States to divert their limited resources to areas which may have a low priority in the affairs of a State. 'Centrally sponsored schemes have grown in volume and number over the years. As of April 1985, the schemes under implementation were as many as 262. The outlay of Rs 18,000 crore approximately of these schemes accounted for about 80 per cent of Central assistance provided for the State Plans during the Seventh Five Year Plan. This has happened in spite of States' objection to their proliferation and the decision of NDC in 1979 to roll them back to the level of 1/6th of Central assistance for States' Plans by hacking away schemes costing a total of Rs 2000 crore. More recently, the NDC after considering the Ramamurti Committee Report in November 1985 had set up a Committee headed by the then Union Minister for Human Resources Development to go into this matter. This Committee had in turn constituted a group of officials whose recommendations favour retention of most of the schemes' [Finance Commission, 1988, para 4.21]. The confrontation between the Centre and the States on this issue was considerably reduced

when, in the December 23-24, 1991 meeting of the NDC, it was decided to transfer 113 Centrally sponsored schemes to the States along with the allocation being made for these schemes. Although the assistance for Centrally sponsored schemes flows directly from the concerned Ministries to the States and is not, therefore, subject to the Gadgil Formula, it will be a misnomer to call assistance under these schemes as 'discretionary'. There are, of course, well formulated criteria (poverty ratios, etc.) for allocating assistance under these schemes.

SIZE AND PATTERN OF CENTRAL TRANSFERS

Regarding the magnitude of Central transfers to the States, claims and counter-claims are to be expected. The States have often complained that resources allocated to them are inadequate to enable them to discharge their responsibilities. They complain against widening gap between their own resources and needs, and their increasing dependence on the Centre. They want their resources to be commensurate with their obligations and responsibilities. Similarly, the Centre feels constrained at the widening gap between its resources and needs, as reflected in the budgetary deficits. Since the early eighties, the Centre has been running considerable deficit on its revenue account. Its commitments towards defence, subsidies, and interest payments claim a major chunk of its resources and there is little hope of any relief on these accounts in the near future.

According to the calculations of the Sarkaria Commission, the transfer of total resources from the Centre to the States during the period 1951-85 was 22.6 per cent of the combined aggregate resources of the Centre and the States. These transfers accounted for 31.6 per cent of the total resources raised by the Centre [Sarkaria Commission, 1988, Part I, Annexure X. 13]. But, the share of the States has been increasing over the years. Between 1974-75 and 1978-79, revenue accruals of the States ranged between 54 to 58 per cent of the combined revenue receipts of the Centre and the States. This increased and varied between 60 to 63 per cent during 1979-80 to 1988-89 (Table 6).

TABLE 6. REVENUE ACCRUALS OF THE CENTRE AND THE STATES

(Rs Crore)

Year	Revenue Receipts of Centre and States	Revenue Accruals of States	Per Cent Revenue Accruals to States Col. 3/Col.2
1974-75	11,048	6,004	54.34
1975-76	13,687	7,475	54.61
1976-77	15,258	8,652	56.70
1977-78	16,435	9,401	57.20
1978-79	18,775	11,008	58.63
1979-80	21,211	13,060	61.57
1980-81	23,835	15,036	63.08
1981-82	28,881	17,504	60.61
1982-83	33,086	20,243	61.18
1983-84	36,959	22,908	61.98
1984-85	42,933	26,220	61.07
1985-86	51,011	31,906	62.55
1986-87	58,434	35,981	61.58
1987-88(RE)	67,349	41,383	61.45
1988-89(BE)	74,781	45,549	60.91

Source: *Second Report of the Ninth Finance Commission*, 1989, Appendix 3, Table B.3.3 (excerpted).

Thus, the Central Government raises the major part of combined resources and a significant part of that is transferred to the States to ensure vertical equity in the distribution of resources. Centralisation of revenues and adjustments thereafter is a characteristic feature of most federations of the world. Thus, to view Central transfers to the States as indicative of the latter's dependence on the former is erroneous because a significant part of the transfers takes place under constitutional provisions and in accordance with predetermined formulas. To the question whether the Centre has been making adequate transfers to the States, the Sarkaria Commission concluded: 'The Union

Government is thus already transferring substantial resources to the States. Under the present circumstances, there is need to pay attention to structural changes in transfers for which there is apparently greater scope' [Sarkaria Commission 1988, Part I, para 10.7.27].

During the initial years of the planning period, the percentage share of Plan transfers in total Central transfers to the States was much higher as compared to statutory and other transfers. For example, the share of Plan transfers was 61.5 per cent during 1951-56 as compared to 31.2 per cent of statutory transfers (through Finance Commission) and 7.3 per cent of other transfers during the same period. Statutory transfers ranged between 28 per cent to 35 per cent during the first 25 years of planning (1951-74) and have stayed above 40.0 per cent thereafter. Broadly speaking, statutory transfers, plan transfers, and other transfers have remained in the ratio of 40:40:20 over the period 1979-90 (Table 7). Transfers through the Finance Commission have been almost wholly on revenue account, and mainly by way of tax sharing. Plan transfers carry a large loan component.

TABLE 7. PATTERN OF CENTRAL TRANSFERS TO THE STATES

(Rs Crore)

Plan period	Statutory transfers through Finance Commissions*	Plan transfers through Planning Commission**	Transfers other than those through Finance Commission and Planning Commission	Total
1951-56	447	880	104	1,431
	(31.2)	(61.5)	(7.3)	(100.0)
1956-61	918	1,058	892	2,868
	(32.0)	(36.9)	(31.1)	(100.0)
1961-66	1,590	2,738	1,272	5,600
	(28.4)	(48.9)	(22.7)	(100.0)
1966-69	1,782	1,917	1,648	5,347
	(33.3)	(35.9)	(30.8)	(100.0)
1969-74	5,421	4,731	4,949	15,101
	(35.9)	(31.3)	(32.8)	(100.0)
1974-79	11,168	10,353	3,761	25,282
	(44.2)	(40.9)	(14.9)	(100.0)
1979-85	28,584	29,655	12,849	71,088
	(40.2)	(41.7)	(18.1)	(100.0)
1985-90	54,449	55,062	27,125	1,36,636
	(39.8)	(40.3)	(19.8)	(100.0)

* Share in divisible taxes and duties, and statutory and other grants. ** Grants and loans for State Plans, and Central/Centrally sponsored schemes.

Note: Figures in brackets indicate percentage to the total transfers.

Sources: For the period 1951 to 1979, *Report of the Seventh Finance Commission* (1978), Appendix IV. 1 (ii), (iii) and (iv), pp. 174-77; For the periods 1979-85, and 1985-89, *RBI Bulletin* (Finances of State Governments) November 1985, p. 800, and *RBI Bulletin* (Supplement on Finances of State Governments) April, 1991, p. 32.

INTER-REGIONAL INEQUALITIES AND TRANSFERS

Federalism is not only a unifying but also a levelling force. Considerable economic inequalities exist among different States of India and their reduction is an argument in favour of centralisation of resources. An indication of inter-State economic disparities is provided by differences in per capita State Domestic Product. If the city State of Goa is ignored, the per capita income was highest in Punjab (Rs 4,013) being 85.3 per cent above the all-States average (Rs 2,165) for the average of the three years 1982-85. At the other extreme, the per capita income of Bihar (Rs 1,323) was 38.8 per cent below the all-States average (Table 8, col 6). To put it differently, the per capita income of Punjab was slightly more than three-times the per capita income of Bihar. Similarly, the All-India Debt and Investment Survey, 1981-82, organised by the National Sample Survey brought out significant differences in the average value of total assets per household in different States. The average value of total assets per household was again the highest in Punjab (Rs 85,204) being 129.3 per cent above the all-India average of Rs 37,160. The

lowest average value of total assets was in Orissa (Rs 18,127) which was 51.2 per cent below the all-India average [Reserve Bank of India, Bulletin, 1986, p. 439].

TABLE 8. STATE-WISE PER CAPITA INCOME JUXTAPOSED AGAINST PER CAPITA SHARE IN CENTRAL TAXES AND GRANTS

States (in descending order of per capita income)	Population (average of 1981 and 1991 censuses) (Crore)	Per capita income* (Rs)	Transfer of Central taxes and grants (annual average 1981-90) (Rs crore)	Per capita transfer of Central taxes & grants col. 4/col.2 (Rs)	Per capita income (col. 3) above (+)/ below (-) all-states average (per cent)	Per capita transfer of Central taxes and grants (col. 5) above (+)/ below (-) all-states average (per cent)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Non-Special Category States						
1. Punjab	1.848	4,013	263	142	+ 85.3	- 22.8
2. Maharashtra	7.074	3,384	942	133	+ 56.3	- 27.7
3. Haryana	1.461	3,343	208	142	+ 54.4	- 22.8
4. Gujarat	3.762	2,919	520	138	+ 34.8	- 25.0
5. Karnataka	4.097	2,461	575	140	+ 13.6	-23.9
6. West Bengal	6.128	2,230	943	154	+ 3.0	- 16.4
7. Kerala	2.723	2,144	448	164	- 0.9	- 10.8
8. Tamil Nadu	5.201	2,142	816	157	- 1.1	- 14.7
9. Andhra Pradesh	5.992	2,053	919	153	- 5.1	- 16.8
10. Madhya Pradesh	5.915	1,860	939	159	- 14.0	- 13.5
11. Rajasthan	3.907	1,820	706	181	- 15.9	- 1.6
12. Orissa	2.894	1,728	650	225	- 20.1	+ 22.3
13. Uttar Pradesh	12.481	1,713	2,007	161	- 20.8	- 12.5
14. Bihar	7.812	1,323	1,234	158	- 38.8	- 14.1
Goa and Special Category States						
1. Goa	0.112	4,437	88**	785	+ 104.9	+ 326.6
2. Arunachal Pradesh	0.074	2,746	252**	3,405	+ 26.8	+ 1750.5
3. Sikkim	0.035	2,570	71	2,028	+ 18.7	+ 1,002.2
4. Jammu & Kashmir	0.684	2,380	407	595	+ 9.9	+ 223.4
5. Nagaland	0.099	2,268	221	2,232	+ 4.7	+ 1,113.0
6. Manipur	0.162	2,205	194	1,197	+ 1.8	+ 550.5
7. Himachal Pradesh	0.469	2,103	341	727	- 2.8	+ 295.1
8. Meghalaya	0.154	1,960	159	1,032	- 9.4	+ 460.8
9. Assam	2.109	1,863	584	277	- 13.9	+ 50.5
10. Tripura	0.239	1,784	215	899	- 17.5	+ 388.5
11. Mizoram	0.058	1,778	215**	3,706	- 17.8	+ 1,914.1
All States	75.511	2,165	13,917	184		

* Per capita State Domestic Product, New Series, at current prices (Average of the three years (1982-85)

** Average of the years 1986-90

Note: Grants in column 4 include all types of Central grants routed through the Finance Commission and the Planning Commission.

Sources: Population figures in column 2 obtained from *India 1986*, p. 8 (1981 Census) and *Economic Survey*, 1990-91, p. S-98 (1991 Census); Per capita income figures in column 3 from *Second Report of the Ninth Finance Commission, p.* 79; Figures in column 4 rearranged from *RBI Bulletin* (Supplement on Finances of State Governments) April 1991, Pp. 43-44. All other calculations by the author.

To examine the redistributory role of Central transfers to States, we have juxtaposed State-wise per capita income (Table 8, col. 3) against the per capita transfers of Central taxes and grants (Table 8, col 5). The loan component of aggregate Central transfers has been left out because loans involve repayment and therefore cannot be treated on par with other transfers. Comparable State-wise figures of Central transfers are not available for the entire period 1950-90 in view of reorganisation of States from time to time and the conversion of some Union Territories into States. It is seen that per capita share of all Special Category States in Central taxes and grants was invariably above the all-States average irrespective of the level of their per capita income. In the case of five States (Arunachal Pradesh, Sikkim, Jammu & Kashmir, Nagaland, and Manipur), the

per capita income was also above the all-States average while in the case of the remaining five States (Himachal Pradesh, Meghalaya, Assam, Tripura, and Mizoram) it was below the all-States average. For Goa, both per capita income and per capita share in Central taxes and grants were above the all-States average. Evidently, Special Category States (and Goa) are the biggest beneficiaries of Central transfers in per capita terms.

As far as the Non-Special Category States are concerned, the picture is not so clear. It is, of course, true that all the States whose per capita income was above all-States average received per capita transfer of Central taxes and grants below the all-States average. However, it is disturbing to note that States with per capita income below the all-States average also got per capita share in taxes and grants below the all-States average. The only exception in this regard was Orissa whose per capita income was below the all-States average but per capita share in taxes and grants was above the all-States average. Thus, the distribution formulae of Finance Commission and Planning Commission are no doubt unfavourable to the interests of relatively richer States; but, they are not necessarily helpful to the needs of the poorer Non-Special Category States. More progressive formulae are needed to serve their needs.

STATES INDEBTEDNESS

While the non-Plan revenue gap of the States is looked after by the Finance Commission, the Planning Commission takes care of the Plan gap, both on revenue and capital accounts. Article 293(2) empowers the Union Government to make loans to the States and it has been doing so ever since the commencement of the Constitution. These are largely for implementing Five Year Plans. The existing pattern of assistance, under the Gadgil Formula, has a loan-grant ratio of 70:30. The Sarkaria Commission noted: 'For the State Plan as a whole, the actual pattern of Central assistance during the Sixth Plan works out to 40 per cent grant and 60 per cent loan. Central assistance for the Centrally Sponsored and Central Sector Schemes has a high grant component (92.3 per cent in the Sixth Plan period). In the totality of Plan transfers during this period, the proportion of grant was 56.1 per cent and of loan 43.9 per cent. This is a significant fact which should be kept in view in any discussion on the pattern of Central assistance both from the viewpoint of States' repayment liability and Union Government's ability to transfer more capital resources to the States' [Sarkaria Commission, 1988, Part I, para 10.10.19]. Of course, in this context, it is important to bear in mind that the Centre itself raises a significant part of the resources for the plan by borrowing.

The large loan component of Plan assistance has proved very burdensome for the States over the years and, because of their failure to repay Central loans, the debt and debt-servicing liabilities of the States have been mounting. The problem is not new though it has aggravated in recent years. The Second Finance Commission was asked to examine this problem and make suitable recommendations to reduce States' debt burden. The Commission recommended, *inter alia*, consolidation, and in some cases postponement of repayment, of loans made by the Government of India to the States between August 15, 1947 and March 31, 1956 [Finance Commission, 1957, para 160]. The matter was again referred to the Fourth Finance Commission which expressed its inability to make a thorough investigation of the problem and suggest lasting solutions in the short period of time at its disposal.

At the time of the appointment of the Fifth Finance Commission, the problem of States' unauthorised overdrafts had become quite serious. The Central Government asked this Commission to examine the issue and suggest measures to discourage the States from resorting to unauthorised overdrafts. The Commission came down severely on the States and observed: 'We consider that it would not be proper for the Reserve Bank to treat its notice to a State Government for clearing its overdraft as a routine measure. It should be the duty of the State Government to take all possible steps for clearing the overdraft, failing which the Reserve Bank must proceed to stop payment of the State's cheques ... If a State Government persists in incurring an unauthorised overdraft, we are of opinion that it would not be proper that the Central Government should clear it. The consequences of the State's failure to clear the overdraft will then have to be faced. If a persistent overdraft occurs, or if it is not found possible to clear an overdraft in accordance with the procedure that we have

suggested, the Central Government would have to take a view within the period of notice given by the Reserve Bank whether the crisis resulting from the stoppage of payment of the State's cheques should be allowed to develop or it would be expedient to forestall it by the invocation of its constitutional powers' [Finance Commission, 1969, paras 52 and 55].

The matter again came up in the terms of reference of the Sixth Finance Commission. It was asked to estimate the non-Plan capital gaps in the States' budget and recommend the extent of revision of terms of repayment of outstanding Central loans to the States so as to reduce such gaps. The Commission recommended moratorium on the repayment of certain Central loans and writing off a few old loans of small amounts. The Seventh, and the Eighth Finance Commissions provided debt relief in the form of debt rescheduling and/or writing off but it was inadequate.

There is a feeling in some quarters that the Constitution has unduly restricted the borrowing powers of the States. Under Article 292, the executive power of the Centre extends to borrowing, either within or outside India, upon the security of the Consolidated Fund of India, within such limits, if any, as may from time to time be fixed by Parliament. However, under Article 293, the borrowing power of a State is subject to a number of restrictions: (i) it cannot borrow outside India; (ii) it can borrow within the territory of India subject to the following conditions (a) limitations as may be imposed by the State Legislature, (b) consent of the Union Government to raise fresh loan if the Union has guaranteed an outstanding loan of the State, (c) consent of the Union to raise fresh loan if a Union loan to the State remains outstanding. Since all the States are in debt to the Centre, they have to obtain Centre's permission for raising loans. These restrictions are meant to avoid uncontrolled borrowings by the States and thus to prevent the possibility of any State becoming defaulter or insolvent.

The Sarkaria Commission suggested that a distinction should be made between short-term loans (under one year) and medium and long-term loans. It recommended that the Centre should give its consent freely to States for borrowing from banks and other financial institutions for periods less than one year under clause (4) of Article 293. The suggestion that a thorough examination of the States' indebtedness should be undertaken by a National Debt Commission as an 'one-shot operation' did not find favour with the Commission which believed that in the fast changing situation, the results from such an operation will soon be outdated [Sarkaria Commission 1988, Part I, para 10.10.54]. The problem of States' indebtedness is serious and remedial measures are called for in this regard. Any delay in this matter would only compound the difficulties of the States, particularly highly indebted States.

ARTICLES 268 AND 269

Articles 268 and 269 of the Constitution place under the charge of the Centre, taxes and duties which have inter-State character and require uniformity in rate structure for the smooth conduct of business and trade activities throughout the country. These two Articles mention items of taxes/duties which shall be levied by the Centre but assigned completely to the States within which they are leviable. In spite of the obligatory language used in these two constitutional provisions, the Centre has not exploited them for the benefit of States. Even the States have generally remained lukewarm in demanding the tapping of this source by the Centre for their benefit.

Article 268 mentions duties which shall be levied by the Union but collected and appropriated by the States within which they are leviable. These are duties of excise on medicinal and toilet preparations containing alcohol, and stamp duties, and correspond to entries 84 and 91 of the Union List in the Seventh Schedule of the Constitution. The Eighth Finance Commission was asked for the first time to examine the scope for enhancing revenues from these duties.

Duties on medicinal and toilet preparations are imposed under the Medicinal and Toilet Preparations (Excise Duties) Act, 1955. Since the rates of duties on these preparations were increased in 1982 (the year in which the Commission was constituted), the Commission did not find any scope for enhancing this duty at that time. As regards stamp duties, the Commission examined

them individually in respect of bills of exchange, cheques, promissory notes, bills of lading, letters of credit, policies of insurance, transfer of shares, debentures, proxies, and receipts. These documents are executed in the course of business and trade and they find place in the Union List to ensure uniformity of rates throughout the country. The levy and collection of stamp duty is governed by the Indian Stamp Duty Act, 1899 which was last amended in 1976 when rates of stamp duty on certain instruments were revised.

After ascertaining the views of States and other relevant agencies, the Commission did not think it desirable to raise the rates of stamp duty on bills of exchange, promissory notes, life insurance policies, transfer of shares, debentures, proxies, and receipts. Raising duty on these instruments was considered to be detrimental to the growth of trade and industry. The Commission also disfavoured reimposition of stamp duty on cheques (stamp duty was payable on cheques prior to 1927 but was withdrawn in that year). However, the Commission opined that scope for raising the rates of duty exists in respect of bills of lading, letters of credit, and policies of general insurance.

Article 269 mentions taxes and duties which shall be levied and collected by the Union but assigned completely to the States within which they are leviable. The Eighth Finance Commission erroneously used the words 'may be' instead of 'shall be' for these taxes and duties. [Finance Commission, 1984, para 15.30]. These are (a) estate duty in respect of property other than agricultural land; (b) succession duty in respect of property other than agricultural land; (c) terminal taxes on goods or passengers carried by railway, sea or air; (d) taxes on railway fares and freights; (e) taxes other than stamp duties on transactions in stock-exchanges and future markets; (f) taxes on the sale or purchase of newspapers and on advertisements published therein; (g) taxes on the sale or purchase of goods other than newspapers, where such sale or purchase takes place in the course of inter-State trade or commerce; and (h) taxes on the consignment of goods where such consignment takes place in the course of inter-State trade or commerce. Out of the eight taxes and duties mentioned under Article 269(1) only one is being levied at present viz., inter-State sales tax. The Fifth and the Eighth Finance Commissions examined the scope for raising revenue from these taxes and duties. [Finance Commission, 1969, Ch. 7 and Finance Commission, 1984, Ch. 15].

The first two duties mentioned under Article 269(1)(a) and (b) pertain to estate duty and succession duty in respect of property other than agricultural land and correspond to entries 87 and 88 respectively of the Union List. The levy of succession duty is on parts of an estate passing on to each of the successors while estate duty is levied on the value of the whole estate. Since the incidence of both these duties is on the same object, they are essentially similar in nature though, of course, in a progressive system, the revenues will be different - more from an estate duty than from a succession duty. Accepting this argument and also in view of the fact that estate duty was in operation at that time, both the Fifth and the Eighth Finance Commissions discounted the possibility of raising revenues from succession duty. Later, pursuant to the recommendations of the Economic Administration Reforms Commission, estate duty was abolished with effect from March 16, 1985 on the ground that it had failed in both its objectives, viz., to reduce the accumulation of dynastic wealth and raise resources for the Government. The Commission noted that 96.8 per cent of the assessees in 1980-81 related to the estates whose principal value was less than Rs 3 lakh [EARC, 1981-83, p. 33].

Article 269(1)(c) relates to terminal taxes on goods or passengers carried by railway, sea or air and corresponds to entry 89 of the Union List. A terminal tax is akin to octroi duty which is levied by local bodies on goods entering their territorial limits for consumption, sale or use therein. The Fifth and the Eighth Finance Commissions expressed themselves against their imposition on grounds of administrative difficulties and meagre revenue potential. It may be noted that there already exists a terminal tax on passengers carried by railway from or to certain places of pilgrimage or where fairs or exhibitions are held. The proceeds of the tax are credited to the Consolidated Fund of the concerned States. The tax is restrictive

and limited in scope and not a general terminal tax on passengers carried by railway to all places.

Article 269(1)(d) refers to taxes on railway fares and freights and correspond to entry 89 of the Union List. Grant in lieu of repealed tax on railway fares has already been discussed. The Eighth Finance Commission favoured levying tax on railway passenger fares but not until the present arrangement of giving grants in lieu of such a tax continues to exist. Both the Fifth and the Eighth Finance Commissions saw no advantage in the levy of a tax on railway freights.

Article 269(1)(e) relates to 'taxes other than stamp duties on transactions in stock exchanges and future markets' and correspond to entry 90 of the Union List. Considering that the development of stock exchanges in the country was at a formative stage, the Eighth Finance Commission did not think it advisable to levy taxes on transactions in stock exchanges and future markets.

Article 269(1)(f) mentions 'taxes on the sale or purchase of newspapers and on advertisements published therein' and correspond to entry 92 of the Union List. In view of the fact that the newspaper reading habit is not sufficiently developed and widespread in the country, both the Fifth and the Eighth Finance Commissions did not recommend a tax on the sale or purchase of newspapers. However, both the Commissions opined that there was scope for tax on advertisements published in newspapers. The Eighth Finance Commission cautioned that a tax on advertisement, if levied, should be borne by the advertisers themselves and not passed on to the newspapers and journals.

Article 269(1)(g) relates to taxation of inter-State trade and corresponds to entry 92A of the Union List. In the pre-Constitution period, the sales tax laws in different States were so fashioned as to enable them to tax goods exported from one State to another. Exports to and imports from foreign countries were also subjected to sales tax. To deal with these anomalies, the Taxation Enquiry Commission recommended: 'In essence, the sales tax must continue to be a State tax. However, power and responsibility of the State must end and that of the Union begin when the sales tax of one State impinges administratively and fiscally on the consumers of another State. Inter-State sales tax should be the concern of the Union' [Taxation Enquiry Commission, Vol. III, 1953-54, p. 519]. Consequently, the Constitution was amended by the Sixth Amendment Act, 1956 to empower Parliament to impose 'taxes on the sale or purchase of goods other than newspapers, where such sale or purchase takes place in the course of inter-State trade or commerce.' This new provision in the Constitution was made by inserting entry 92A in List I (Union List) of the Seventh Schedule and simultaneously amending Article 269 by inserting sub-clause 269(1)(g). Consequent upon this constitutional amendment, the Central Sales Tax (CST) Act was passed in 1956. Section 14 of this Act declares certain goods to be of special importance in inter-State trade while section 15 lays down the rate structure. Since the Eighth Finance Commission was asked to examine taxes/duties not being levied, it did not discuss inter-State sales tax which is being levied since 1956.

When the CST Act was passed, the rate of sales tax on inter-State trade was fixed at 1 per cent. Over the years, the rate has been raised by stages to the present level of 4 per cent. This trend has generally been favourable to industrially advanced States at the cost of industrially backward States. Since manufactures are the main items of inter-State trade, the relatively developed States are able to export a part of their taxation to other States. In effect, it amounts to transfer of financial resources from poorer States to richer States, much against the national policy of regional balanced development.

Article 269(1)(h) refers to taxes on consignment of goods and corresponds to entry 92B of the Union List. When CST Act was passed in 1956, it left out of its ambit the consignments (or stock-transfers) from a company to its branch located in a different State. Since no sale is involved, it is called in-house transaction by a company. The loophole has come in handy for unscrupulous parties to evade sales tax by showing virtual sales as consignments from one State to another. Therefore, through the Constitution (Forty-Sixth Amendment) Act, 1982, Parliament was empowered to levy 'taxes on the

consignment of goods, where such consignment takes place in the course of inter-State trade or commerce.' This was done by inserting entry 92B in the Union List of the Seventh Schedule and simultaneously amending Article 269 by inserting sub-clause 269(1)(h). Ever since, the States have been pressing the Centre to levy this tax, the net proceeds of which are entirely assignable to them. The Sarkaria Commission (1988) also impressed upon the Government to 'bring in suitable legislation in this regard without further loss of time' [Sarkaria Commission, 1988, Part I, para 10.9.12]. Unfortunately, the needful has not been done.

CENTRAL INROADS INTO STATE SUBJECTS

Although the division of taxation powers between the Centre and the States is clear-cut, it is not so in the case of economic activities. A number of economic functions falls in the Concurrent List and those which belong to State List are subject, in many cases, to the provisions of the Union List. This is partly the result of the original scheme of the Constitution and is partly attributable to subsequent amendments of the Constitution. Although each amendment has a logic of its own, they can be said to have encroached upon States' sphere of legislation when considered collectively (Table 9).

TABLE 9. CONSTITUTIONAL AMENDMENTS AFFECTING DIVISION OF FINANCIAL/ECONOMIC POWERS BETWEEN THE CENTRE AND THE STATES

Name of the Act	Date of Commencement	Nature of the Amendment
Constitution (Third Amendment) Act, 1954	22.2.1955	Entry 33 of Concurrent List of the Seventh Schedule was enlarged by transferring the contents of Article 369. Parliament was enabled to have concurrent jurisdiction to legislate on trade, commerce, production, supply, and distribution of foodstuffs, raw cotton, raw jute, etc.
Constitution (Sixth Amendment) Act, 1956	11.9.1956	Articles 269 and 286, and Entry 54 of State List of the Seventh Schedule amended. Entry 92A inserted in the Union List of the same Schedule. Parliament was empowered to impose sales tax on inter-State trade.
Constitution (Seventh Amendment) Act, 1956	1.11.1956	Entry 24 of State List of the Seventh Schedule pertaining to industries was made subject to entries 7 and 52 of the Union List of the same Schedule. Entry 7 relates to industries considered necessary for defence while entry 52 covers industries, the control of which is considered expedient in public interest. Before the amendment entry 24 was subject only to the provisions of entry 52.
Constitution (Forty Second Amendment) Act 1976	Different provisions came into force on different dates commencing 3.1.1977	Forests, and protection of wild animals and birds originally belonging to State List were transferred to Concurrent List. Population control and family planning were inserted in the Concurrent List as entry 20A. States' power to levy tax on 'advertisement broadcast by radio or television' was precluded in entry 55 of State List in addition to the already existing exception in that entry of tax on 'advertisements published in newspapers'.
Constitution (Forty Sixth Amendment) Act 1982	2.2.1983	Parliament was empowered to levy taxes on the consignment of goods in inter-State trade. Entry 92B was inserted in the Union List of the 7th Schedule for the purpose and simultaneously sub clause 269(1)(h) was inserted in Article 269.

Sources: Compiled from: (1) *The Constitution of India; (2) Report of the Commission on Centre-State Relations, Part I*, 1988, Pp. 93-96; and (3) Durga Das Basu, *Introduction to the Constitution of India* Pp. 403-12.

Agriculture as such figures in the State List (Entry 14) but certain aspects of agriculture fall in the Concurrent List/Union List. Thus, fisheries belong to the State List (Entry 21) but fishing and fisheries beyond territorial waters belong to the Union List (Entry 57). The enlargement of Entry 33 in the Concurrent List through the Constitution (Third Amendment) Act, 1954 made agriculture virtually a concurrent subject. It reads as follows: 'Trade and Commerce in, and the production, supply and distribution of: (a) the products of any industry where the control of such industry by the Union is declared by Parliament by law to be expedient in the public interest, and imported goods of the same kind as such products; (b) foodstuffs, including edible oilseeds and oils; (c) cattle fodder, including oilcakes and other concentrates; (d) raw cotton, whether ginned or unginned and cotton seed; and (e) raw jute.' Thus, trade, commerce, production, supply and distribution of foodstuffs, including edible oils and oil seeds, are covered by the Concurrent List.

Similarly, animal husbandry and veterinary training are State subjects (Entry 15) but prevention of cruelty to animals is a concurrent subject (Entry 17). Forestry and protection of wild animals and birds originally belonged to the State List (Entries 19 and 20). However, they were transferred to the Concurrent List (Entries 17A and 17B) through the Constitution (Forty-second Amendment) Act, 1976.

Also included in the Concurrent List are other economic activities such as economic and social planning, population control and family planning, commercial and industrial monopolies, trade unions, social security, and price control (Entries 20, 20A, 21, 22, 23 and 34, respectively).

Water and power development is another important area of State activity subject to the Central control. Water supplies, irrigation and canals, drainage and embankments, water storage and water power belong to the State List (Entry 17) but these are subject to the provisions of Union List (Entry 56) which deals with the regulation and development of inter-State rivers and river valleys. Since electricity belongs to Concurrent List (Entry 38), the Centre's concurrent jurisdiction on water power is automatic.

Regulation of mines and mineral development belongs to State List (Entry 23) subject to certain provisions of the Union List. Thus, mineral resources necessary for the production of atomic energy (List I, Entry 6) belong to the Centre and so also oil fields and mineral oil resources, petroleum and petroleum products, and other dangerously inflammable liquids and substances (Entry 53). Similarly, Central Government is empowered to regulate mines and mineral development to the extent to which it is in public interest to do so (Entry 54). Moreover, the regulation of labour and safety in mines and oil fields is also a Central subject (Entry 55).

In the field of transport, roads, bridges, ferries, and other means of communication (not specified in List I), municipal tramways, ropeways, inland waterways and traffic thereon and vehicles other than mechanically propelled vehicles belong to the State List (Entry 13). However, this is subject to certain provisions in the Union List and the Concurrent List. Thus, national highways, and national waterways (List I, Entries 23 and 24 respectively) belong to the Central Government. Similarly, the Centre has concurrent jurisdiction over ports other than major ports, and shipping and navigation on inland waterways (List III, Entries 31 and 32 respectively). It may be noted that Centre enjoys exclusive powers in major areas of transport and communications. The following fields are included in the Union List: Railways, maritime shipping and navigation, major ports, airways, and posts and telegraphs (entries 22, 25, 27, 29, and 31, respectively).

The all important sphere of industries fall within the purview of State List (Entry 24) but through the Constitution (Seventh Amendment) Act, 1956 this field was made subject to Entries 7 and 52 of the Union List. Before this amendment, Entry 24 of State List was subject only to the provisions of Entry 52 of Union List. Entry 7 covers industries considered necessary for the purpose of defence or for the prosecution of war. Entry 52 covers industries, the control of which by the Centre is considered expedient in the public interest. Besides this, the Centre also enjoys concurrent jurisdiction (List III, Entry 33) in many matters related to industries. The main legislation used by the Centre to exercise its right under Entry 52 is the Industrial (Development and Regulation) Act,

1951, the First Schedule of which includes industries brought under the Central control in public interest. Almost all important industries in the country are included in this Schedule. Added to this control is the Central ownership of a vast public sector comprising industrial, financial and commercial enterprises. However, in view of the liberalization and privatisation moves of the Government announced in the Industrial Policy Statement of July 1991, the Central authority in the industrial sphere is likely to get weakened in the years to come and it is unlikely that the States would insist on acquiring the powers being relinquished by the Centre. Still, it cannot be gainsaid that Centre's inroads into State subjects have caused stresses and strains in the relations between the two-tiers of the Government.

FINANCIAL AUTONOMY FOR STATES: CONCLUDING REMARKS

We may conclude this review by touching briefly upon the question of more financial powers and hence autonomy to the States. Although the proponents are vague in defining greater financial autonomy, it should, *inter alia*, include transfer of additional taxation heads from the Centre to the States. If such a transfer is to take place, the main beneficiaries would be the richer States who have adequate bases/handles to collect tax revenues. Poorer States like Orissa or Bihar can do little with more taxation powers. The solution lies more in the speedy development of the backward States which will increase tax collections automatically with existing taxation powers. Another moot question is whether the States have used adequately the taxation powers already available to them. For instance, taxation of agricultural incomes is a State subject but this source has not been tapped by the States adequately. Presently, about half a dozen States levy agricultural income tax, in three of them it is confined to plantation crops, and in all the cases the revenue is meagre. The share of this tax in the total revenue from States' taxes has remained negligible, just around 1 per cent. Similarly, land revenue which was the principal direct tax of the States at the time of Independence has been given up partially or fully by most of the States.

Moreover, any weakening of the financial strength of the Central Government will adversely affect the economic viability of weaker States and Special Category States. The backward States have often argued for a financially strong Centre to ensure their own speedy development. Thus, the system of Centre-State financial relations is a tug-of-war not only between the Centre and the States but also among the States themselves. As the Sarkaria Commission has noted: 'Generally, the States have stated that there is no need to make any changes in the division of the areas of taxation envisaged in the Constitution. In fact, one State has pointed out that any transfer of taxation fields now with the Union to the States would make the rich States richer and the poor States poorer. The Union Ministry of Finance also holds that the present system has a sound rational basis and may not require any alteration' [Sarkaria Commission, 1988, Part I, para 10.3.09].

NOTES

1. 'Following the outbreak of World War II and the increasing expenditure it entailed on the Centre, steps had to be taken to strengthen Central finances. It was decided that for the duration of the war, the Centre should be permitted to retain a fixed sum of Rs 4.5 crore out of the provincial share of income tax. The Order-in-Council was amended accordingly to secure this and the modified provision regulated the distribution of the tax from 1940-41 to 1945-46. In each of the next four years the sum retained by the Centre from the provincial share was reduced by Rs 75 lakh a year over the previous year, and the full provincial share was restored to the Provinces in 1950-51' [Finance Commission, 1952, Ch. II, para 26].

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APPENDIX I
CHRONOLOGY OF FINANCE COMMISSIONS

Finance Commission	Year of Establi-shment	Year of Reporting	Period of Award	Name of the Chairman
First	Nov. 1951	Dec. 1952	1952-57	Mr. K.C. Neogy
Second	June 1956	Sep. 1957	1957-62	Mr. K. Santhanam
Third	Dec. 1960	Dec. 1961	1962-66	Mr. A.K. Chanda
Fourth	May 1964	Aug. 1965	1966-69	Mr. P. V. Rajamannar
Fifth	Feb. 1968	July 1969	1969-74	Mr. Mahavir Tyagi
Sixth	June 1972	Oct. 1973	1974-79	Mr. K. Brahmananda Reddy
Seventh	June 1977	Oct. 1978	1979-84	Justice J.M. Shelat
Eighth	June 1982	Apr. 1984	1984-89	Mr. Y.B. Chavan
Ninth	June 1987	July 1988	1989-90	Mr. N.K.P. Salve
		Dec. 1989	1990-95	

Source: *Reports of the Finance Commissions*.

APPENDIX II
NINTH FINANCE COMMISSION ON THE ROLE AND AUTHORITY OF FINANCE COMMISSION VERSUS PLANNING COMMISSION

7.8 At this stage we should make it quite clear that we are not determining the Plan (revenue) outlay of the States. We are only estimating the likely minimum revenue expenditure in the Eighth Plan of each State and that too on an overall basis. In doing so, the only targeting we have attempted is a moderate correction of the disparities in social and economic services expenditure in the different non-Special Category States. For other States, we are simply going by the base year (1989-90) figures as determined by the Planning Commission. This would adequately serve our limited purpose of assessing the total revenue expenditure and determining the needs of each State for grants under Article 275. The actual determination of each State's Plan outlay including the outlay on the revenue account, its distribution among the different Sectors, will all have to be done, as before, by the Planning Commission.

7.9 Coming to the determination of each State's need for aid under Article 275, we must make it clear that under this Article, the Finance Commission is obliged to recommend the grants-in-aid of revenue to States and, therefore, the grants for financing the State Plans are very much within the purview of the Commission under the said Article. In fact there is a

view that all grants to the States could be channelled through Article 275 only. Mr. K.K. Venugopal, an expert on Constitutional law, opined before us that Article 282 is clear and unambiguous and unless the article is re-written with the addition and subtraction of words it would not be possible to arrive at the conclusion that Article 282 is an independent source of power vesting in the Central Government a discretion to make grants to States for special purposes. As against this, Mr. N.A. Palkhivala opined: "Article 282 is not intended to enable the Union to make such grants as fall properly under article 275. Article 282 embodies merely a residuary power which enables the Union or a State to make any grant for any public purpose, irrespective of the question whether the purpose is one over which the grantor has legislative competence." Thus according to Mr. Palkhivala residuary power of grants for public purposes vests under Article 282 in the Union and the State Governments. We may also refer to the commentary of Dr. D.D. Basu on *Constitution of India*, 6th Edition, Volume 'K', page 312. "There is no limit to the grants which can be made by the Union under Article 282 and, in fact, the volume of grants to the States under Article 282 vie with those made under Article 275. Thus, in 1979-80, while the States received Rs 375 crore through the Finance Commission, the sum received through the Planning Commission amounted to Rs 3,159 crore. This is striking in view of the fact that Article 282 is residual provision regarding grants in-aid".

Thus opinions on this issues differ widely. The Commission considers it unnecessary to involve itself in the controversy relating to the precise limits on the scope of Article 282 *vis-a-vis* Article 275. But we are quite certain that if our Constitutional obligations under Article 280 read with Article 275 require us to enlarge the scope of grants beyond the non-plan account limitations, we should not hesitate to do so. We are convinced that such a situation exists now. This is the result of a combination of two major factors. The first is the vast disparity among States in the size of the non-Plan revenue account position. The other is the fact that the Gadgil formula has no linkage to the non-plan revenue account position or the overall financial position of State Governments. As yet, there is no formal channel through which additional assistance could be extended to those States whose non-Plan revenue accounts have no surplus and whose shares of Gadgil formula grants are substantially less than their approved Plan revenue expenditures. Such States have to divert their borrowings to meet a good part of their revenue Plan requirements and this sets in motion a vicious circle which, ultimately, may invalidate the very concept of balanced regional development. We propose to introduce a mechanism to correct this basic flaw in the present system of federal fiscal transfers. We are clear in our mind that Article 275 provides full Constitutional support for such a new arrangement.

Shri Justice A.S. Qureshi, Member, has opined that Article 275 is the only source for giving grants-in-aid to States. He has elaborated his view on this issue in his Note of Dissent.

JUSTICE A. S. QURESHI ON
GRANTS-IN-AID WITH SPECIAL REFERENCE
TO ARTICLE 275 AND ARTICLE 282

2.1 The scheme of Chapter 1 of Part XII of the Constitution is that all regular fiscal transfers from the Centre to the States by way of grants are covered under Article 275. There is no distinction made between the plan and non-plan receipts and expenditures, while making the assessment of the needs of the States. Nor does Article 275 make any distinction on the capital and revenue accounts. The Finance Commission alone has the jurisdiction, powers and authority to make regular transfers from the Centre to the States under Articles 275. The said scheme envisages that the Finance Commission appointed under Article 280 would be an independent, impartial, objective and semi-judicial body to adjudicate and arbitrate between the Centre and the States in the matter of fiscal transfers, on the principles of equity, justice and fair dealing. By misinterpreting the provisions of Articles 275 and 280, the Centre has, in the past, curtailed the Finance Commissions' jurisdiction, powers and authority by making regular discretionary grants to the States for their plan and non-plan expenditures.

2.2 The plan grants and expenditures were in the past expressly excluded from the purview of the Finance Commissions by their terms of reference. In total contravention of the Constitutional provisions the plan grants were given to the States by the Union Government through the Planning Commission, which is an extra-Constitutional body. The Planning Commission not only gave plan grants but also gave even the grants-in-aid of the revenues of the States to fill the budgetary gaps, on the ground that there was no Finance Commission in existence at that time. This is gross violation of the Constitutional provisions and amounts to the subversion of an important Constitutional body like the Finance Commission.

2.3 The Centre has not expressly stated under what provisions of the Constitution does it give the discretionary plan grants to the States. But, it can be safely assumed that it must be under Article 282 because there is no other provision in the Constitution which confers power on the Centre to make discretionary grants to the States. Although apparently the language of Article 282 appears to be wide enough to cover all grants so long as they are for public purpose. But the apparent width of power has to be understood in its context. The power under Article 282 cannot be construed to mean that the Centre can give grants to States on a regular basis. The regular grants from the Centre to the States can be given only under Article 275 and only through the Finance Commission recommendations. If the power under article 282 is interpreted to mean that it is an alternative channel of regular transfers from the Centre to the States it would disrupt the delicate and judicious fiscal equilibrium which the Finance Commission is expected to bring about through the regular channel under Article 275. The Constitution makers could not have intended to bring about such a disruption. If Article 282 was intended to be a second channel for regular transfers from the Centre to the States, that Article would have been grouped together with Articles 268 to 281 under the heading, "Distribution of Revenues between the Union and the States". The fact that Article 282 is separated from those Articles and put under a separate heading. "Miscellaneous Financial Provisions"

shows that it is not intended to be used as a second channel of transfers from the Centre to the States. Moreover, the marginal note on Article 282 is: "Expenditure defrayable by the Union or a State out of its revenues" clearly indicates that it is an expenditure to be met by the Union or a State to meet a particular situation provided that it is for a public purpose. Article 282 permits the Centre and the States to incur expenditure even on subjects which are not within the legislative competence of the Centre or the States as the case may be. Under Article 73, the Union's executive power to give grants extends to the matters with respect to which the Parliament has the power to make laws. This is an embargo on the Centre's power to give discretionary grants to the States. This embargo is lifted by the non-obstant clause in Article 282 whereby the Centre can give discretionary grants to the States even when it has no legislative power on the subject. The lifting of the embargo clearly suggests that the power to give grants under Article 282 is an "emergency power" to be used in exceptional circumstances only. This is so for another reason also, namely, the power under Article 282 can also be exercised by any State to give grants to the Centre or to another State which must necessarily be in emergency or exceptional circumstances. Moreover, Article 282 does not lay down as to whom such grants can be given. The only condition in the Article is that it must be for a 'public purpose'. It means that so long as the purpose is public and not private, it can be given even to voluntary organisations or institutions irrespective of whether they are controlled by the Centre or any States. It must also be remembered that any expansion of the scope of Article 282 would necessarily result in the corresponding abridgement of the scope of Article 275, which could not have been intended by the Constitution makers. .....

2.6 In the majority recommendation on this point, there is a quotation from the eminent jurist, Shri N.A. Palkhivala, to the effect that the power under Article 282 is a 'residuary' power. Taken out of context the quotation may create a wrong impression that the power is 'residuary' in the sense that over and above the grants under Article 275 there is 'residuary' power under Article 282 also to give such grants. This is not true. Shri Palkhivala has categorically opined that regular grants from the Centre to the States do not come under Article 282. He has also stated in his written opinion that the regular grants for plan and non-plan expenditures on capital as well as revenue accounts can come only under Article 275 and it is within the jurisdiction of the Finance Commission only.

2.7 In the Commission's meeting a suggestion was made by a Member that the discretionary plan grants given by the Centre to the States through the Planning Commission do not fall either under Article 275 or under Article 282. It was further stated that the Union Government has power under Articles 112 to 114 to appropriate funds for its own expenditure, a part of which it can use for giving discretionary grants to the States. In my opinion, this view is not correct. The sums appropriated by the Union Government for its own expenditure cannot be transferred to the States as discretionary grants because it would run counter to the jurisdiction, powers and authority of the Finance Commission to give grants-in-aid under Article 275 and would upset the fiscal balance brought about by the Finance Commission on the principles of justice, equity and fair play. The discretionary grants could be arbitrary, unfair and unjust, favouring some States at the cost of others. The discretionary grants by the Centre for plan or non-plan expenditure, either on capital account or revenue account under Article 282 or Articles 112 to 114 or under any other provision of the Constitution would disrupt the whole scheme of Chapter I of Part XII of the Constitution. It is incumbent on all concerned that the provision of the Constitution should be read in a harmonious manner because the Constitution is an organic document and therefore, its different parts must be understood, interpreted and acted upon so as to bring about harmony, and not disruption.

2.8 The Union Government has consistently misconstrued and misused the emergency power under Article 282 almost since the Constitution came into force. Consequently, larger and larger unauthorised and unconstitutional transfers have been made to the States and in the process curtailed the jurisdiction, powers and authority of the Finance Commission to give to the State the grants under Article 275. The following table illustrates this fact:

GRANTS FROM THE CENTRE TO THE STATES

(Rs crore)

Period	Grants under Art. 275(I)		Other Grants		Total Grants
	Amount	Per cent to Total Grants	Amount	Per cent to Total Grants	
(0)	(1)	(2)	(3)	(4)	(5)
1. I Plan (1951-56)	24	12.6	166	87.4	190
2. II Plan (1956-61)	153	21.5	558	78.5	711
3. III Plan (1961-66)	292	22.2	1,023	77.8	1,315
4. Three Annual Plans (1966-69)	422	27.7	1,100	72.3	1,522
5. IV Plan (1969-74)	737	18.9	3,166	81.1	3,903
6. V Plan (1974-78)	2,068	35.8	3,703	64.2	5,771
7. Two Annual Plans (1978-80)	927	19.6	3,808	80.4	4,735
8. VI Plan (1980-85)	2,020	11.0	16,408	89.0	18,428
9. VII Plan (1985-90)	6,182	14.1	37,565	85.9	43,747
(i) 1985-86	975	14.8	5,634	85.2	6,609
(ii) 1986-87	869	12.0	6,389	88.0	7,258
(iii) 1987-88	1,195	13.2	7,846	86.8	9,041
(iv) 1988-89(RE)	1,266	12.7	8,673	87.3	9,939
(v) 1989-90(BE)	1,877	17.2	9,023	82.8	10,900
Total (1951-90)	12,825	16.0	67,497	84.0	80,322

Note: Compensatory grants in lieu of the repealed Tax on Railway Passenger Fares are not included.

The above table clearly shows that since 1951-52 to 1989-90 (BE), Rs 12,825 crore (16.0%) were transferred under Article 275 on the basis of the Finance Commissions' recommendations whereas a much larger amount of Rs 67,497 crore (84.0%) were transferred as discretionary grants by the Centre outside the recommendations of successive Finance Commissions.

2.9 While using the power to give discretionary grants to the States under Article 282, the Centre has used the Planning Commission as the medium. The Planning Commission is an extra-Constitutional body and has no basis either in the Constitution or in any legislative enactment. It is purely a creation of the Union government by a resolution. Its functions are not defined nor is there any limit to the number of its members. Its duration also is not fixed. The Prime Minister is its ex-officio Chairman and there are Cabinet Ministers among its Members. Its Members are picked and chosen to suit the requirements of the Union government. From its composition it can be described as a quasi-political body. It enjoys vast authority and prestige. It has undoubtedly a very crucial role to play in the planned and orderly development of the country. But, even such a high-powered body cannot take over and exercise, the jurisdiction, powers and authority of the purely Constitutional body like the Finance Commission. The Planning Commission cannot be expected to discharge quasi-judicial functions envisaged in Chapter I of Part XII of the Constitution. In our discussions in the Commission a point of view was expressed that if the Finance Commission exercises its powers of going into plan expenditure and giving plan grants, it would disrupt the planning process. I do not agree with that view point. It is not correct to say that the Planning Commission can work only if it has power to give discretionary grants to the States. Even without such a power it can and should function effectively. In my opinion, the Finance Commission and the Planning Commission have independent and distinct roles to play. Neither need impinge on the other's authority or functions. I am of the view that, under the scheme of Chapter I of Part XII of the Constitution, the Finance Commission has to decide the parameters of resources available through its judicious distribution between the Centre and the States for plan and non-plan expenditures, on the capital account as well as revenue account. The Finance Commission has to do this on the principles of justice, equity and fair-play, so as to maintain fiscal equilibrium between the Centre and the States as well as between one State and another. In other words, the Finance Commission has to maintain the fiscal balance, vertically and horizontally. After the resource position of the Centre and the States is determined by the Finance Commission, the role of the Planning Commission begins in determining the priorities for the planned development. Where to spend and how to spend the available resources is within the respective spheres of the Centre and the States, who may with the help and guidance of the Planning Commission set out priorities and make the best use of the allocated funds. This is the sphere where the Planning Commission has an important role to play. The Finance Commission is not concerned with it at all. .....

2.11 The question regarding giving regular plan grants under Article 282 is a very important matter which goes to the very root of the jurisdiction of the Finance Commission. It was, therefore, necessary and proper for this Commission to go into that question in its report. I, therefore, do not agree with the majority view that we should not go into that question or express an opinion on it. The Commission has discussed this point in considerable details. We had sought and obtained written opinion from a number of eminent constitutional experts. We had also invited a number of experts from the legal profession and academic institutions, who expressed their learned opinions, from which we have benefitted quite a lot. After putting in so much effort, it would, in my opinion, be improper to brush aside the question and skirt the issue. Speaking for myself after having gone into the question in some depth I am fully convinced that the above interpretation of Article 282 *vis-a-vis* Article 275 is correct.

2.12 I would therefore recommend to the President that

(i) The scope of the recommendations of the Finance Commission should not be restricted to the non-Plan revenue and expenditure accounts only as done in the past. The Commission should be left free to cover plan and non-plan, revenue as well as capital expenditures and general as well as capital grants under Article 275;

(ii) No restriction direct or indirect should be put on the jurisdiction, powers and authority of the Finance Commissions, which are conferred by Chapter I of Part XII of the Constitution;

(iii) That the Union Government should not give any plan or non-plan grants to the States on a regular basis which can be given only by the Finance Commission under Article 275;

(iv) The special public purpose grants under Article 282 may be given by the Centre on ad hoc basis only, to meet exceptional or emergency situations and not as a regular alternative channel of Central transfers to the States;

(v) The Union Government should not exercise the jurisdiction, powers and authority of the Finance Commission through the Planning Commission, Finance Ministry or any of its other organs under the pretext that the Finance Commission is not in existence at that time.

ADJUSTMENT AND HUMAN DEVELOPMENT IN INDIA

Martin Ravallion and K. Subbarao *

"The human costs of adjustment are often a matter of choice, not of compulsion", Human Development Report (UNDP, 1990, p. 4).

The main threats to India's progress in human development associated with the current adjustment process are the impending slow-down in aggregate economic growth, the likely increases in food-staple prices, any spill-over effects into the urban informal sector from contracting industries, and any cuts in public spending on basic social services and transfers benefiting the poor. Maintaining progress in human development during the adjustment period will require well targeted income support and care in protecting key social services. Central and State governments can help protect the living standards of vulnerable groups.

Will the policy reforms underway in India - even if successful in the medium term - entail that human development is stalled? Will poverty increase before it falls? These questions are important for current policy discussions. In attempting to answer them we shall argue that:

i) There are two key aspects to maintaining progress in human development in India during the adjustment period: a) avoiding an increase in poverty, and b) protecting key social services. Both are essential.

ii) The main threats to India's poor associated with the adjustment process are the impending slow-down in aggregate economic growth, the likely increases in food-staple prices, any spill-over effects into the urban informal sector from contracting industries, and any cuts in public spending on basic social services and transfers benefiting the poor.

iii) Central and State Governments of India can do much to protect the living standards of vulnerable groups during the process of adjustment. Two types of support are needed: The first should emphasize transfer programmes which are self-regulating (meaning that they can expand and contract rapidly as needed) and self-targeting (in that they create incentives for self-selection by the poor). The second should entail a pro-poor re-alignment of current public expenditures in favour of primary and lower secondary education and preventive health care, for girls as well as boys.

In making these arguments we will assume that adjustment in India will entail a combination of devaluations (which have happened), fiscal contraction (which is expected), and trade and industrial deregulation (underway). We will focus solely on short-term impacts (over the next two or three years). The distinction between short-term and long-term impacts is, of course, intrinsic to adjustment; many of the potentially quite positive impacts of adjustment on living standards of the poor (such as an expansion in labour intensive exports) will take time to be felt, while some of the costs will be felt quite quickly.

In discussing the short-term impacts of adjustment on human development, we will be concerned with both income poverty and access to social services, notably basic health and education. It might be argued that impacts arising through cuts in public spending on social services are unlikely to be of serious short-term consequence, on the grounds that either these categories of spending had previously brought little benefit to the poor (so that cutting them will not hurt the poor), or that any effects of such cuts will be felt in the longer term (and may well be made up for later). We do not believe either argument is valid in discussing adjustment related stress in India. The poor do benefit from certain (though quite specific) categories of public spending, and the effects of cutting these could be felt quite rapidly.

Section I summarizes what we see as the relevant "stylized facts" about poverty in India at the beginning of the adjustment period. These form the basis of a set of "propositions" about likely

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impacts of adjustment on human development. We outline these propositions in Section II, drawing out some implications for income transfer and safety net policies, as well as public spending on social services. Our conclusions and policy recommendations are summarized in Section III.

Given data limitations, some of our "stylized facts" are (we readily admit) more "stylized" than others, and few are beyond contention. Thus some of the "propositions" we derive might be better thought of as "hypotheses" or even "conjectures", and they are (like any forecast) somewhat speculative. At a minimum we hope they will serve to open up a constructive public discussion of the social dimensions of adjustment in India, and of the appropriate policy responses for protecting the poor during adjustment.

I. PROGRESS IN POVERTY REDUCTION AT THE BEGINNING OF THE 1990s

An Overview

If the poor of India in 1947 - the date of Independence - were to be transposed to the present, the vast majority would undoubtedly find that they were better off now, and some would find that they are very much better off. Almost all would find that they have more to eat, that they are less vulnerable to famine, that they have a better chance of avoiding severe illness and of finding treatment, and some would find that they are able to read and write. There are indeed a great many things that the poor of 1947 would be capable of doing now that would not have been possible then.

However, that is no reason to be complacent about India's past or likely future progress from the point of view of the poor. There is still a great deal that India's poor cannot do now that is entirely within India's abilities to deliver.

This section will take a broad overview of India's progress in reducing poverty over recent decades. The aim is to set the scene for the subsequent discussion of how adjustment in the 1990's might hinder - or enhance - future progress.

Stylized fact 1: While real progress was made in poverty alleviation for 10 or so years prior to the mid-1980s, there has been little sign of significant progress since then.

India has good data for making poverty comparisons over time. While roughly two-thirds of developing countries do not have a single nationally representative household survey which permits a convincing estimation of the distribution of household consumption or income for the 1980s, India has four such surveys spanning the decade. Indeed, for India one can compile a time series of consumption distribution spanning 40 years.

However, there are some serious inadequacies of the household level data for India. The main survey instrument - the National Sample Survey (NSS) - is good for consumption data, but it does not generally collect income data, and so it has limited use for constructing the sorts of detailed sectoral poverty profiles that can illuminate (amongst other things) the effects of shifts in the sectoral pattern of growth on poverty during adjustment.[1] The NSS data is also relatively weak on another important issue (not least in an adjustment context), namely, access to and utilization of public services by different consumption groups.[2] A further problem is that the unit-record data tapes for the NSS are not available to the public, thus greatly restricting the prospects for the type of household data-based empirical analyses of policy issues that have become routine in many developing countries.

Nonetheless, the incidence, depth and severity of poverty in India prior to the current adjustment period can be estimated with reasonable confidence at the national level, and separately for rural and urban India, with the published data from the National Sample Surveys of 1983, 1986-87, 1987-88 and 1988-89.[3] We shall use the long-standing poverty line of Rs 15 per person per day in rural areas at 1960-61 prices.[4] The Consumer Price Index for Agricultural Labourers (CPIAL) and The Consumer Price Index for Industrial Workers (CPIIW) are used as deflators for rural and urban areas respectively (though we will comment on alternative deflators). An estimate of the all-India urban-rural price differential for 1973-74 is derived from Bhattacharya *et al* (1980), which is adjusted over time using CPIAL and CPIIW [Bhattacharya, *et al*, 1980, Pp.

107-121].[5]

We shall focus on three poverty measures, all of which are members of the class of measures proposed by Foster, Greer and Thorbecke (FGT) in 1984. They are: the head-count index, the poverty-gap index, and the Foster-Greer-Thorbecke measures.[6] However, rather than treat these as alternative measures, we prefer to interpret them as measures of three different things: the head-count index is a measure of the *incidence* of poverty, the poverty-gap index is a measure of the *depth* of poverty, while the FGT measures the *severity* of poverty [Ravallion, 1992].

TABLE 1. POVERTY AND INEQUALITY IN INDIA IN THE 1980S

Year	Head-count index (per cent deemed poor)	Poverty gap index (proportionate poverty gap per cent)	Severity index (FGT distribution sensitive measure per cent)	Gini index of inequality
Rural areas				
1983	32.8	8.1	2.8	30.1
1986-87	26.2	5.8	1.8	30.3
1987-88	25.8 (28.3)	5.3 (6.0)	1.5 (1.8)	30.1
1988-89	25.7	5.1	1.4	29.5
Urban areas				
1983	27.9	6.5	2.0	34.1
1986-87	26.1	6.4	2.1	36.4
1987-88	27.4 (27.8)	6.2 (6.4)	1.9 (2.0)	35.5
1988-89	27.3	6.1	1.8	33.9

Note: Figures in brackets are based on Minhas *et al* deflator applied to Dandekar-Rath poverty line in 1983 prices; see text.

Table 1 gives poverty and inequality measures for India in the 1980s.[7] In rural areas, all poverty measures fell over the period, though levelling out from the mid-1980s. The decrease from 1983 to 1986-87 is statistically significant, while the changes from 1986-87 to 1987-88 and from 1987-88 to 1988-89 are not.[8] In urban areas the head-count index showed a slight increase from the mid-1980s (from 1986-87 to 1987-88), though the increase is not statistically significant at the one per cent level. The slight decrease from 1987-88 to 1988-89 is not significant at any reasonable level. The other urban poverty measures generally declined (with a slight up-turn in the severity index in the mid-1980s).

These poverty and inequality measures have been worked from NSS data going back to 1951.[9] They show a similar pattern over time. Though there was an increase in poverty incidence for the first few years of the series,[10] on the whole there was little sign of a trend in either urban or rural poverty incidence up to about the mid-1970s; both fluctuated around a constant level, though persistently showing higher levels in rural areas. The head-count index fell in both sectors for ten or so years up to the mid-1980s. There has been little change since then.

Stylized fact 2: Historically, the incidence, depth and severity of absolute poverty have been higher in rural areas than urban areas of India. The last few years have seen some signs of a change in this pattern, with poverty indices now being similar, and even slightly higher, in urban areas, though absolute numbers of poor are still far higher in rural areas. Methodological problems cloud the poverty comparison between sectors somewhat, though it seems clear that the severity of extreme poverty is now no higher in rural areas than in urban areas. However, a marked urban bias in access to social services persists. For example, recent evidence suggests that public health spending per capita is over six times higher in urban areas. Another important element in the sectoral structure of poverty in India undoubtedly also persists, namely, the marked difference in living standards between the formal and informal segments of the urban labour market.

Poverty lines adjusted for cost of living differences have typically shown higher poverty measures in rural areas than in urban areas of India. This is common in developing countries [World Bank, 1990, Ch. 2]. The head-count index of poverty was significantly higher in rural areas in 1983. In 1986-87 there was no significant difference. However, in 1987-88 and 1988-89 the urban index was higher than the rural index, and the differences are statistically significant.[11] Since 1986-87 there have been signs of a possible reversal of the historical pattern.

There are reasons to be cautious about this finding. The choice of price deflators may matter here. Alternative deflators to those used above have been constructed by Minhas *et al* [Minhas, *et al*, 1991, Pp. 1673-1682]. Their deflator suggests a higher rate of inflation in rural areas during the 1980s than does the CPIAL, though their urban deflator is similar to the CPIIW. The Minhas *et al* deflator thus yields less sign of a convergence between urban and rural poverty measures during the 1980s. Though for a higher poverty line than we have used, the estimates of the head-count indices for 1983 and 1987-88 given in Minhas *et al* show markedly higher poverty incidence in rural areas than urban areas [Minhas, *et al*, 1991, Pp. 1673-1682].

To assess the impact of the choice of deflator, next to the 1987-88 figures in Table 1 we give estimates consistent with the Minhas *et al* deflators but using our lower poverty line. (These have been "anchored" to the 1983 poverty line i.e., we apply the Minhas *et al* deflators to our 1983 nominal poverty lines, and then re-estimate the 1987-88 poverty measures.)

We find that the urban head-count index of 1987-88 is now lower than the rural index, though the difference is not statistically significant. The finding that urban poverty incidence is significantly higher than rural incidence in the late 1980s is sensitive to the choice of deflator. However, this is only true for the head-count index; both the depth and severity of poverty still show the aforementioned reversal in sector rankings when comparing 1983 with 1987-88.

Note that two factors account for this difference between our estimates and those of Minhas *et al*: the difference in deflators, and the real difference in poverty lines. Our lower poverty lines (focusing more on the poorest of the poor) tend to show little or no difference between urban and rural poverty incidence in the late 1980s, and higher severity of poverty in urban areas.

These poverty measures are based solely on consumption expenditure (essentially on market goods). They do not include valuations of the benefits derived from public spending. Here there still appears to be a marked urban bias. For example, rural India's share of public health service spending (including spending on water supply and family planning) was less than 29 per cent of the total in 1986-87 [Ravishankar, 1988]. Since rural India represented about 73 per cent of the total population at that time, this implies that public health spending per capita in rural areas was only 15 per cent of that in urban areas. This must surely explain, in no small measure, the rural and urban differences in infant mortality rates, which we will discuss further below.

TABLE 2. STRUCTURE OF INDIA'S WORK FORCE AND AVERAGE INCOME, 1980-81

Sector	Proportion of work force (per cent)	Average income (Rs/Year/worker)
Wages and salary earners	43.4	4,468
Organised sector	10.3	10,851
Public	7.0	10,643
Private	3.3	11,289
Unorganized sector	33.1	2,482
Agricultural workers	24.9	1,703
Non-agricultural workers	8.1	4,871
Self-employed	56.6	3,549
Cultivators	41.6	3,000
Non-cultivators	15.1	5,066
	100	3,948

Source: EIS, 1990, Centre for Monitoring the Indian Economy, Bombay.

Unfortunately the available NSS data do not allow us to calculate more detailed sectoral poverty profiles than the crude urban-rural breakdown given in Table 1. However, an idea of the likely structure of poverty by sector of employment can be obtained from Central Statistical Organisation (CSO) data. Table 2 gives the (latest available, to our knowledge) CSO based estimates of average annual income per worker for different sectors of the Indian economy.

Consider a worker with three dependents, living in urban areas and with no other source of income. In 1980-81, he or she would have needed an income of about Rs. 3,500 per year to reach the consumption level of the commonly assumed poverty line in India. Thus the typical worker in these circumstances employed in the organized sector would have earned about three times the poverty line, while the typical worker in the un-organized sector would have been poor. But even in the un-organized sector there is a large gap between agricultural workers and the non-agricultural (primarily urban) workers; the former were, on average, well below the poverty line (this is still true if one uses rural prices as the base), while the latter would have been comfortably above it. The typical small cultivator with three dependents would have had adequate earnings not to remain below the poverty line.

In summary, it may be premature to say that we are seeing a radical shift in the profile of poverty, recognizing that there are methodological problems to do with the sectoral price deflators, and the choice of a poverty line. Nonetheless, the evidence for the late 1980s should add further reason to be wary about possible adverse social impacts of adjustment on the urban sector, particularly amongst the poorest of the poor. India has reached a point where it can be argued that we should be just as concerned about impacts of adjustment on the urban poor as on the rural poor.

Stylized fact 3: Historically, India's poor have generally benefitted from growth in aggregate private consumption, and lost from its contraction. This is true in both urban and rural areas.

Any change in the incidence, depth or severity of poverty can be attributed to two factors: changes in the distribution of consumption, and changes in the average level of consumption. The former can be termed the "redistribution component" while the latter is the "growth component".[12]

A simple decomposition can be devised for any change in measured poverty. This allows one to rigorously quantify the relative importance of growth *versus* re-distribution. The change in poverty is decomposed as the sum of a growth component (the change in poverty that would have been observed if the Lorenz curve had not shifted), a re-distribution component (the change that would have been observed if the mean had not shifted), and a residual (the interaction between growth and redistribution effects), [See Datt and Ravallion, 1991c, for an exposition].

Applying this decomposition to recent data for India one finds that growth in average consumption in both urban and rural India has been the main factor underlying the progress in poverty reduction during the 1980s. However, improved distribution (favouring the poor) has not been irrelevant by any means.[13] For example, there is evidence that improved distribution helped buffer the adverse impacts on the poor of the 1987 drought.[14]

Looking back over the last 40 years, one sees a strong statistical relationship between movements in the poverty measures in India and changes in average consumption per capita. If one regresses a suitable non-linear function of the head-count index from 1951 to 1988-89 on the mean of the relevant NSS distribution, and allowing for likely properties of the error structure which would bias ordinary least squares estimates, then the following results are obtained (absolute t-ratios in parentheses):[15]

$$\log[H^r/(100-H^r)] = \underset{(9.33)}{11.02} - \underset{(9.57)}{3.80} \cdot \log(\mu^r) + \text{residual}\quad R^2 = 0.94$$

$$\log[H^u/(100-H^u)] = \underset{(3.27)}{9.68} - \underset{(3.46)}{2.22} \cdot \log(\mu^u) + \text{residual}\quad R^2 = 0.80$$

where H^i and μ^i denote the head-count index of poverty (in per cent) and the mean consumption per capita respectively, for i=r(ural), u(rban). The relationship is quite strong for both sectors, though less so for the urban sector. The regressions suggest that expansion and contraction in average consumption has been a casually

important driving force in movements in poverty in both sectors. The mean elasticities of the head-count index with respect to the mean consumption are -2.2 for rural areas (ranging from -2.8 to -1.7), and -1.9 in urban areas (-2.2 to -1.7). In the last year of the series the elasticities are -2.8 for rural areas, and -2.2 for urban areas.

The key implication of these estimates is that the incidence of poverty in both sectors of India has tended to be quite responsive to expansion and contraction in aggregate consumption. The elasticities are around two or higher, so that (for example) a five per cent fall in mean consumption could be expected to lead to a ten per cent or more increase in the proportion of poor. With a population growth rate of a little over two per cent per year, these elasticities imply that the number of poor in India will start to increase if the annual growth rate in consumption per capita falls much below one per cent.

These estimates are based on historical trends, and so they should only be considered a rough guide to the likely orders of magnitude. The actual experience could be quite different if the aggregate growth or contraction is accompanied by unusual shifts in relative inequalities. Nonetheless, they do suggest that (without improved distribution, relative to past trends) an aggregate contraction in private consumption could well be accompanied by a sizable worsening in poverty numbers.

Stylized fact 4: Since Independence, there has been an improvement in literacy and a reduction in infant mortality, though the gains are unexceptional by the standards of other developing countries starting from a similar base; indeed, the gains have been no better or worse than that achieved by the developing world as a whole. Substantial differences in the rate of progress are found by gender and region.

Table 3 gives social indicators for India and the average for developing countries, as well as those for two examples of countries which had initially similar social indicators to that of India. The rates of improvement in India have been close to those of the developing world as a whole. Around 20-30 years ago, India had markedly worse social indicators than a typical developing country. That is still true today. Many countries have done far better, as can be seen from Table 3.

TABLE 3. TRENDS IN SOCIAL INDICATORS 1960-1990

	Life Expectancy at birth (years) births)		Under-five mortality (deaths/ 1000)		Adult literacy rate (per cent)		School enrollment rate (primary+ secondary, per cent)	
	1960 1990	per cent gain	1960 1989	per cent gain	1970 1985	per cent gain	1970 1987	per cent gain
India	44.0		282		34		49	
	59.1	34	145	-49	44	29	66	35
China	47.1		203		na		66	
	70.1	49	43	-79	na	-	83	26
Indonesia	41.2		225		54		49	
	61.5	49	100	-56	72	33	84	71
Developing	46.2		233		46		55	
Countries	62.8	36	116	-50	60	30	70	27

These aggregates hide large disparities within India. The infant mortality rate (IMR) in urban India was 62 deaths per 1000 live births in 1988, while the corresponding rate in rural areas was 102 (SRS Census documents). The rural IMR's continue to be very high in six poor states: Madhya Pradesh (128), Orissa (126) and Uttar Pradesh (132), Rajasthan (109), Assam (101) and Bihar (99) (Table 4).

Notwithstanding substantial expansion of educational institutions at all levels, progress in literacy (and enrolments) was uneven by region, sex and rural/urban residence. The most obvious stylized facts are: (a) urban literacy rates are almost twice as high as rural rates; (b) females in both rural and urban India have lower literacy rates; and (c) rural rates have grown faster than urban rates but this is due to the lower base from

TABLE 4. INFANT MORTALITY RATES, 1970-1988

		1970	1975	1981	1984	1988
Andhra Pradesh	R	122	130	93	81	89
	U	79	81	52	66	63
Assam	R	138	147	107	100	101
	U	78	96	76	77	66
Bihar	R	NA	NA	124	96	99
	U	NA	NA	60	79	70
Gujarat	R	159	165	123	126	101
	U	131	113	89	56	64
Haryana	R	82	122	108	110	94
	U	61	58	52	64	72
Himachal Pradesh	R	151	117	72	92	82
	U	76	55	65	46	41
Jammu & Kashmir	R	76	72	76	83	75
	U	43	39	41	51	53
Karnataka	R	105	86	77	84	83
	U	54	60	45	43	46
Kerala	R	60	57	40	29	29
	U	48	36	24	27	22
Madhya Pradesh	R	152	159	152	130	128
	U	113	90	80	76	83
Maharashtra	R	102	97	90	85	76
	U	84	80	49	59	50
Orissa	R	140	153	140	135	126
	U	103	98	68	84	69
Punjab	R	109	107	88	77	63
	U	76	60	51	35	59
Rajasthan	R	132*	169	118	133	109
	U	76*	72	53	69	66
Tamil Nadu	R	134	129	104	90	84
	U	90	65	55	53	51
Uttar Pradesh	R	165	205	157	166	132
	U	110	128	97	99	81
West Bengal	R			98	88	76
	U			44	55	43

Source: *Sample Registration System*, Indian Census Bureau.
R = Rural
U = Urban
NA = Not Available
* = Data relates to year 1972

which they began. Literacy rates for socially disadvantaged groups (the scheduled castes and tribes), and particularly for women among them, were substantially lower than average even during the 1980s [Subbarao, 1987]. Progress has also been uneven regionally: nearly a half of the children not attending school are located in five states (Madhya Pradesh, Uttar Pradesh, Rajasthan, Bihar and Orissa). Wastage in education is enormous, with drop out rates at primary stage amounting to almost 75 per cent in a state such as Bihar. Female rates have grown somewhat slower than male rates so that the gender distance remained more or less unchanged (see Tables 5 and 6). Females enrolled in primary schools per 100 males rose from a low of 39 in 1951 to 60 in 1971, but rose only slowly thereafter to reach 65 in 1985-86. In secondary schools, only about 55 girls per 100 boys were enrolled in 1985-86.

The inferior position of women in India relative to men in terms of their access to social services is often reinforced by a relative disadvantage in access to markets [World Bank, 1991]. As a result they are often in a weaker position to respond to changing economic signals. Adjustment requires an ability to switch from protected to competitive industries and crops. Given their unequal access to markets and publicly provided goods, women will probably find themselves at a disadvantage relative to men during the adjustment period.

TABLE 5. LITERACY RATES (5 YEARS AND ABOVE) BY LOCATION AND BY SEX, 1981 (PER CENT)

States	Persons		Male Rural Literacy Rates and Rank		Male Urban Literacy Rates and Rank		Female Rural Literacy Rates and Rank		Female Urban Literacy Rates and Rank	
Andhra Pradesh	34.09	(10)	36.74	(12)	69.97	(11)	16.07	(10)	47.20	(11)
Bihar	30.24	(13)	39.61	(11)	70.33	(10)	11.80	(11)	46.00	(12)
Gujarat	49.90	(4)	54.78	(4)	77.49	(4)	27.59	(5)	58.15	(5)
Haryana	41.67	(8)	50.05	(6)	74.04	(6)	17.85	(9)	54.00	(7)
Karnataka	43.94	(7)	48.19	(7)	73.62	(7)	22.65	(7)	54.35	(8)
Kerala	78.92	(1)	83.59	(1)	89.25	(1)	71.89	(1)	79.85	(1)
Madhya Pradesh	32.25	(11)	38.10	(13)	73.11	(9)	10.47	(13)	48.64	(10)
Maharashtra	53.60	(2)	58.60	(2)	80.46	(3)	28.29	(4)	62.22	(2)
Orissa	38.83	(9)	50.41	(5)	73.29	(8)	20.96	(8)	49.13	(9)
Punjab	46.30	(5)	47.38	(8)	68.68	(13)	31.36	(2)	56.74	(6)
Rajasthan	28.39	(14)	34.49	(14)	69.12	(12)	6.41	(14)	39.36	(14)
Tamil Nadu	52.64	(34)	57.86	(3)	80.94	(2)	29.11	(3)	60.42	(4)
Uttar Pradesh	31.38	(12)	40.56	(10)	62.15	(14)	11.05	(12)	40.99	(13)
West Bengal	46.23	(6)	46.98	(9)	75.10	(5)	25.31	(6)	60.65	(3)
All India	41.44		46.74		74.00		20.65		54.41	

Note: Figures in bracket represents ranking by state.
Source: Literacy Rates in *Census of India, 1981.*

TABLE 6. ANNUAL INCREASE IN LITERATES AND ILLITERATES BY SEX AND RESIDENCE, 1961-1981 (PER CENT)

Category	Male Literates	Female Literates	Male Illiterates	Female Illiterates
Annual Increase 1961-1971 (Rural)	2.22	1.26	1.79	2.27
Annual Increase 1961-1971 (Urban)	1.12	0.86	0.45	0.54
Annual Increase 1971-1981 (Rural)	3.24	1.73	0.94	2.29
Annual Increase 1971-1981 (Urban)	1.97	1.44	0.62	0.96
Annual Increase 1961-1981 (Rural)	2.73	1.50	1.37	2.28
Annual Increase 1961-1981 (Urban)	1.55	1.15	0.54	0.75

Source: Percentages computed from figures in Sharma and Rutherford, *Recent Literacy Trends in India*, 1987, as cited in Kurian (1990).

Stylized fact 5: As is common in low-income countries, income poverty at the household level is an important determinant of under-nutrition and overall health status in India.

The link between poverty incidence and child nutritional status may be studied by relating the proportion of children who do not attain adequate anthropometric indicators to the head-count index of poverty in different States. The data for the former are available for 1982 and for the latter for 1983.16 The states with higher poverty incidence tend to have higher rates of child undernutrition.[17] The elasticity of the child undernutrition incidence with respect to the incidence of poverty is about one on average, though it tends to increase as poverty incidence increases, reaching 1.5 in the state with highest poverty incidence.[18] It is also interesting to note that the relationship is not attributable to the negative correlation between poverty incidence and average income of the state; it is the incidence of poverty that is the key factor here, not low incomes generally.[19]

Prices and the Poor

Adjustment is typically associated with shifts in relative prices; indeed, without such shifts there may be little long-term gain from adjustment through resource re-allocation. There will typically be both gainers and losers amongst the poor. A key factor in determining the welfare impacts is the pattern of consumption and production at the household level.

Stylized fact 6: India's poor depend on the market economy. The consumer prices that matter most to the poor are those for food-staples (particularly cereals but also pulses), edible oils, vegetables, and fuel for cooking and light. On the other side of the budget constraint of the poor, the key prices are the agricultural wage rate, and the various prices determining the returns (both as wages and profits from self-employment) to urban informal sector activities. Externally traded goods presently account for only a small share of either consumption or production by the poor. Domestic prices of the main food-staples (rice and wheat) and cotton have been below world prices in the 1980s.

A strong and seemingly robust empirical relationship has been observed over time between the incidence and severity of rural poverty in India and the prices of basic wage goods; higher prices lead to an increase in poverty, controlling for agricultural production.[20] This observation begs questions about the dynamic process by which the prices for the goods and services supplied by the poor (particularly their labour time) adjust to changes in consumer prices. We will return to this point in the next stylized fact.

TABLE 7. HOUSEHOLD BUDGET SHARES IN RURAL INDIA 1988-89

	Consumption Group (Based on consumption expenditure per person per month)				
	under Rs 110	Rs 110-215	Rs 215-385	Rs 385 plus	Total
Proportion of population in that group (per cent)	26.0	52.7	17.0	4.3	100.0
			Budget Shares (per cent)		
Cereals	40.1	30.5	19.8	10.5	26.0
Pulses etc.	4.9	4.6	3.7	2.6	4.1
Milk etc.	4.1	8.6	11.5	9.8	8.9
Edible oils	4.8	4.7	4.0	4.4	4.3
Meat, eggs, fish	2.9	3.6	3.9	3.0	3.5
Vegetables	6.7	6.0	4.7	3.2	5.3
Sugar	2.8	3.1	3.0	2.7	3.0
Spices	3.7	3.1	2.5	1.7	2.8
Other Foods	4.4	5.4	6.6	5.7	6.0
Food total	74.4	69.6	59.7	43.6	63.9
Pan, tobacco...	3.9	3.8	3.0	2.4	3.4
Fuel and light	10.0	8.1	6.3	4.2	7.3
Clothing	2.0	4.9	10.7	14.9	7.5
Mis. goods & serv.	9.0	11.9	15.9	19.1	13.6
Durable goods	0.4	1.1	2.8	12.9	3.2
Other non-food	0.3	0.6	1.6	2.9	1.2
Non-food total	25.6	30.4	40.3	56.4	36.2
Total	100.0	100.0	100.0	100.0	100.0

Source: NSSO (1991).

Which consumer prices matter most? Tables 7 and 8 give household budget shares for various categories of goods and various consumption groups for rural and urban areas respectively from the latest available NSS. The NSS does not include data on the value of household production of these goods (which is particularly important for food in rural areas) and so one cannot go directly from the data in these tables to conclusions about the likely welfare effects of changes in relative prices. However, it is plausible that most, if not virtually all, of the rural poor consume more of the food-staples than they produce directly; indeed, most are effectively landless in much of India. Then the direct welfare effect of price changes for the rural poor (and, of course the urban poor) is probably roughly proportional to the budget shares given in Tables 7 and 8. The indirect welfare effects will depend on the "second-round" price and wage effects, of which the effects on agricultural and urban unskilled wages are most important. We shall comment further on these effects later.

TABLE 8. HOUSEHOLD BUDGET SHARES IN URBAN INDIA 1988-89

	Consumption Group (Based on consumption expenditure per person per month)				
	under Rs 110	Rs 110-215	Rs 215-385	Rs 385 plus	Total
Proportion of population in that group (per cent)	9.7	42.6	31.4	16.3	100.0
			Budget Shares (per cent)		
Cereals	33.7	24.1	15.9	7.6	15.5
Pulses etc.	5.0	4.6	3.7	2.3	3.5
Milk etc.	6.1	9.1	11.4	9.8	10.0
Edible oils	5.5	5.7	5.3	3.5	4.7
Meat, eggs, fish	3.6	4.3	4.4	3.5	4.0
Vegetables	6.2	6.3	5.5	3.9	5.2
Sugar	3.1	3.2	2.6	1.6	2.4
Spices	3.8	3.9	2.5	1.4	2.3
Other Foods	6.1	7.2	9.4	11.3	9.5
Food total	73.1	68.4	60.7	44.9	57.1
Pan, tobacco...	3.2	3.1	2.8	2.2	2.7
Fuel and light	9.5	8.5	6.9	4.8	6.6
Clothing	0.9	2.8	5.7	9.5	6.2
Mis. goods & serv.	11.7	14.1	17.9	25.3	19.5
Durable goods	0.4	0.6	1.2	6.3	2.9
Other non-food	1.2	2.5	4.8	7.1	5.0
Non-food total	26.9	31.6	39.3	55.2	42.9
Total	100.0	100.0	100.0	100.0	100.0

Source: NSSO (1991).

While agriculture has accounted for slightly more than one quarter of India's exports in the late 1980s very little of this has been food-staples. A wide range of manufactured goods are exported and these account for the bulk of exports (about 60 per cent of all exports in the late 1980s). We do not have data at a sufficient level of disaggregation to work out budget shares of the poor for these goods. However, from the very low shares devoted to clothing and durable goods (some of which are not traded externally) by the poorest consumption groups in Tables 7 and 8, one can conclude that externally traded manufactured goods could only account for a small proportion of the budgets of the poor. Imports are almost entirely raw materials, intermediate manufactured goods, and capital goods. The few consumer goods which are imported are priced

well out of the reach of the poor.

Thus, by and large, basic wage goods are neither exported nor imported from India; the main externally traded goods are found within the "miscellaneous goods and services", "durables" and "clothing" categories, and they tend to be consumed more intensively by the non-poor.

While most manufactured goods have been protected, cotton and (though less so) rice and wheat have been quite heavily disprotected in the 1980s [Gulati, *et al*, 1990]. Some food-staple prices (such as wheat, but not rice) have still tracked world prices fairly closely in the medium-term [Gulati and Pursell, 1991]. Subsidies on the food-staples (mainly through subsidies on agricultural inputs) appear to account for most of the difference between domestic and world prices. Groundnut prices have been well above world prices [Gulati *et al.*, 1990].

Stylized fact 7: Positive income effects for domestic producers from the expected price changes will undoubtedly flow-on to the poor. But it will take time. There will be lags in the adjustment of output, employment, wages and other earnings of the poor. Higher prices of domestically produced foods will probably entail short-term welfare losses to even the rural poor.

For agriculture, past research has shown that aggregate supply responds to change in price signals. However, the response is not rapid. For example, summing up the available evidence, Binswanger argues that 'Structural adjustment policies are executed to promote agricultural growth and efficiency, but their effects may take several years to materialize. ...But because adjustment efforts typically take time to increase aggregate agricultural supply, possible stagnation or decline in food production and consumption must be kept at the fore.' [Binswanger, 1989, p. 254]. While it might be argued that the response will be faster in the manufacturing sector (though this is only a conjecture), we would be surprised if significant income effects for the poor will arise in the short-term, sufficient to compensate for the short-term welfare losses from any increase in the prices of wage goods (the prospects for which we will discuss later). It is reasonable to assume that the income response will be seen over a period of years rather than months. The direct adverse welfare impacts of higher consumer prices will, however, be immediate.

Associated with this likely sluggishness in the supply side response, the process of adjustment in unskilled labour markets in the subcontinent to price changes also tends, as a rule, to be fairly slow; full indexation of nominal wages with respect to a relevant bundle of goods is eventually achieved, but one should not be surprised if it takes more than a year or two. For example, Boyce and Ravallion have studied the dynamic response of agricultural wages in Bangladesh to rice price changes; they found that increases in rice prices have adverse effects on real wages in the short-run, although full indexation is more plausible in the long-run [Boyce and Ravallion, 1991, Pp. 361-376]. Though there are methodological problems in modelling these processes econometrically,[21] this finding is broadly consistent with research on agricultural wage determination in India.[22] It may take as long as three years before the welfare level of a typical landless agricultural labourer is restored after a 10 per cent rice price increase.[23]

Further research on the dynamics of the adjustment process in relevant markets in India is clearly needed. But from what we know now, it is clear that one must be careful in distinguishing the long-run ("steady state") welfare impacts of adjustment from the short-run impacts; the two need not go in the same direction.

Individual and Community Coping Mechanisms

Can the poor protect themselves from any adverse impacts of adjustment?

Stylized fact 8: While both self-insurance against bad times and community based insurance exist throughout India, they have clear limitations against certain sorts of shocks.

Many of the poor in India face great variability in their incomes, particularly when dependent on rain fed agriculture. They are actively involved in trying to insure themselves against such variability. A variety of risk spreading devices are used, including crop diversification, savings and credit transactions, purchases and sales of assets, and reciprocal transfers.

But these arrangements have limitations, particularly when the shocks involved are widespread or of sustained duration. Savings are rarely able to cope with sizable or sustained income contractions, and the poor appear to be typically credit constrained. One need only look at the performance of coping arrangements during famines to see the limitations; their collapse at such times has often been widely observed in the sub-continent and elsewhere.[24] There are reasons why this happens.[25] When the enforcement of reciprocal ties is difficult, these arrangements will tend to break-down at times when incomes are generally low, or times at which just some incomes are low [Coate and Ravallion, 1991]. Simulations of informal risk-sharing arrangements suggest that they may also be quite sensitive to changes in the circumstances facing the various parties; and active informal insurance arrangement may vanish entirely with a seemingly small drop in the players' aversion to risk or an increase in their discount rate [Coate and Ravallion, 1991]. There has been some empirical work on the performance of community based insurance in villages in India suggesting that it may work quite well at least for idiosyncratic shocks (as opposed to village-wide ones), though further investigations on the (limited) data available has even cast doubt on this conclusion.[26]

From the existing evidence it should not be presumed that the poor will be able to adequately shelter themselves from any adverse effects on their real incomes stemming from macroeconomic adjustment in India.

Public Provisioning of Transfers and Social Services

Recent policy pronouncements have focused more on cutting the budget deficit by cutting spending rather than by raising taxes. We will also concentrate on spending here. However, we do not deny the importance of investigating other options on the revenue side.[27] The impacts on the poor would depend critically on the details of any tax reform - which taxes increase and what new taxes are added - and it seems likely that one could devise a revenue expansion package which would have little or no adverse effect on the poor, at least directly.[28]

Access to social services can be an important determinant of the well-being of the poor, both directly and *via* induced income effects. Adverse impacts of adjustment can arise here through cuts in any public expenditures which had previously benefited the poor, or delays in expanding such outlays.

Stylized fact 9: Governments in India are heavily involved in providing transfers and social services, and poverty alleviation is widely recognized as the primary objective. The state governments play a predominant role in health, education and social safety nets. The shares of national income devoted to public health care, education and transfers have each remained fairly constant since the mid-1970s. However, there have been marked regional differences in per capita spending levels. While only limited data are currently available on the distribution of the benefits of public spending in India, it is reasonably clear that the existing pattern of health and education expenditures is not dovetailed with the need to spread literacy and health care rapidly. Nonetheless, the available evidence does indicate that India's poor do benefit from public spending on social services as well as transfers.

India has many schemes aimed at direct poverty alleviation. These can be interpreted as serving two functions: the alleviation of *chronic* poverty, and the alleviation of *transient* poverty. All of the elements of the existing schemes serve both functions, but in varying degrees, and with varying success.

Since Independence, the Public Distribution System (PDS) has been one of the safety nets supposedly intended to protect the poor and the vulnerable from higher prices for food staples. Many of the poor do benefit from the scheme, though so do the non-poor (at the all-India level see, for example, Minhas, 1990). Its urban bias of initial years has been corrected in some states, but it still remains largely un-targeted and coverage is regionally uneven. A major limitation of past PDS grain allocations to states by the centre has been its lack of sensitivity to state-specific poverty incidence; they are based more on population distribution than on the distribution of the poor

population. The poor's consumption from PDS in the states with the highest concentrations of poverty is very small (Tables 9 and 10). Its outreach excludes some critically poor groups, (such as construction worker families in urban cities), and is grossly inadequate in some blocks/districts with sizable incidence of poverty. Also, the allocation of ration cards is fixed over long periods (four years is common) and so the scheme is unresponsive to transient poverty.

TABLE 9. PDS AS PERCENTAGE OF TOTAL QUANTITY PURCHASED

	Rice		Wheat	
	Rural	Urban	Rural	Urban
Bihar	0.42	0.29	1.51	7.05
Madhya Pradesh	6.14	10.47	7.17	5.65
Rajasthan	7.47	15.94	16.21	3.61
Orissa	0.40	0.41	18.11	25.02
Uttar Pradesh	4.45	8.03	2.43	3.32
West Bengal	6.59	19.48	49.03	69.89
All India	16.76	19.08	12.64	19.33

Source: Compiled from S. Mahandra Dev and M.H. Suryanarayana (1991)

TABLE 10. PERCENTAGE OF QUANTITY OF PURCHASE FROM PDS TO TOTAL PURCHASE BY FRACTILE GROUP: WHEAT

	Rural				Urban			
	0-10	10-20	90-100	All	0-10	10-20	90-100	All
Andhra Pradesh	32.76	7.11	17.19	20.39	48.93	36.79	56.24	47.98
Assam	18.35	39.74	9.95	17.79	4.60	4.16	-	1.65
Bihar	0.48	1.02	1.31	1.51	3.26	6.45	3.79	7.05
Gujarat	57.33	44.18	24.30	37.02	25.35	33.74	9.79	19.63
Haryana	-	-	-	-	-	-	-	-
Himachal Pradesh	21.50	43.08	-	17.01	-	57.19	-	8.81
Jammu & Kashmir	21.24	13.41	24.16	19.35	67.54	59.03	29.69	58.64
Karnataka	25.63	26.48	16.50	22.22	51.82	71.96	15.70	43.78
Kerala	94.72	93.83	94.84	92.04	96.08	100.00	72.18	91.48
Madhya Pradesh	9.01	4.81	7.79	7.17	6.00	4.64	1.31	5.65
Maharashtra	54.59	56.96	23.98	43.13	23.26	29.30	3.74	21.45
Orissa	-	4.86	33.85	18.11	25.43	22.64	20.15	25.02
Punjab	6.97	-	-	0.63	-	-	-	-
Rajasthan	25.07	20.65	6.09	16.21	3.92	7.73	60.74	3.61
Tamil Nadu	95.16	98.36	68.16	77.46	57.36	82.94	40.41	63.48
Tripura	-	-	-	5.63	-	-	-	15.28
Uttar Pradesh	0.63	0.85	14.58	2.43	2.04	1.50	3.42	3.32
West Bengal	42.54	45.08	54.06	49.03	63.30	71.61	75.33	69.87

Source: S. Mahandra Dev and M.H. Suryanarayana (1991).

Views differ widely on the performance of another major anti-poverty scheme, the Integrated Rural Development Programme (IRDP).[29] The essential idea is to target subsidized credit to the poor. Even by the more favourable assessments of this scheme that we know of, it is clear that IRDP is better set-up to deal with chronic poverty (through its ability to increase the assets of the poor, though the evidence is mixed on how well it does that) than transient poverty.

There are various rural relief work schemes, such as Maharashtra's famous "Employment Guarantee Scheme" (EGS) and the national Jawahar Rozgar Yojana (JRY).[30] Such schemes can alleviate poverty by creating income generating assets. But that is not the main way in which they can help buffer the poor from adverse effects of aggregate shocks. Rather, it is that work requirements can provide seemingly excellent incentives for self-targeting in that the non-poor rarely want to participate and a great many of the poor do. The proportion of the gross disbursement which ends up in the hands of the poor (even allowing for forgone incomes from the displaced

activities) appears to be sizable [Ravallion, 1991a, c; Datt and Ravallion, 1992]. Provided the wage rate for relief work is set at the right level (which is discussed further below) demand for work on these schemes fluctuates greatly from season to season and between good agricultural years and bad ones [Ravallion, 1991a].

Turning to public spending on social services, a key point to note is that, under the Constitution, education and health are "state subjects", implying a major fiscal responsibility for the states. Over 70 per cent of spending on all social services (including welfare schemes) and about 90 per cent of health and education expenditures are borne by the states (see Table 11).

TABLE 11. INDIA: COMPOSITION OF EXPENDITURE ON SOCIAL SERVICES[a], 1976/77-1986/87 (PERCENTAGE OF TOTAL)

	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Central Govt. Expenditure[b]										
Education Sector[c]	8.8	8.6	8.1	7.3	6.9	7.4	7.6	7.3	7.6	8.2
Health Sector[d]	1.8	1.7	1.6	1.2	1.4	1.4	1.5	1.3	1.4	1.5
Welfare Expenditure[e]	13.1	12.3	12.4	11.7	10.7	10.4	8.5	8.3	9.3	11.4
Other Sectors[f]	2.5	2.3	2.3	2.4	2.1	2.2	2.0	2.2	2.8	2.2
TOTAL	26.2	24.9	24.4	22.5	21.1	21.4	19.6	19.2	21.1	23.4
State Govt. Expenditure										
Education Sector	40.1	41.2	40.7	39.5	39.6	39.1	39.4	38.9	38.8	37.7
Health Sector	20.0	19.0	19.4	20.3	20.4	20.9	20.9	22.2	21.1	19.9
Welfare Expenditure	7.5	8.1	9.0	9.5	11.5	11.8	11.4	12.1	11.3	10.9
Other Sectors	6.2	6.8	6.6	8.2	7.4	6.8	8.8	7.6	7.8	8.0
TOTAL	73.8	75.1	75.6	77.5	78.9	78.6	80.4	80.8	78.9	76.6
Total Govt. Expenditure										
Education Sector	48.9	49.8	48.8	46.8	46.5	46.5	47.0	46.2	46.4	45.9
Health Sector	21.7	20.7	20.9	21.5	21.8	22.4	22.3	23.5	22.4	21.5
Welfare Expenditure	20.6	20.3	21.4	21.2	22.2	22.2	19.9	20.4	20.6	22.3
Other Sectors	8.7	9.1	8.9	10.6	9.5	9.0	10.8	9.9	10.5	10.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Of which:										
Central Financing	32.1	30.8	31.3	29.4	28.8	28.7	28.3	28.5	29.8	32.0
State Financing	67.9	69.2	68.7	70.6	71.2	71.3	71.7	71.5	70.2	68.0
A. Total Govt. Expenditure (Central & State) on Education (Rs billion)	22.3	25.2	28.4	31.4	37.6	44.10	53.4	60.8	71.6	85.7
B. Total Govt. Expenditure (Central & State) on Health Sector (Rs billion)	9.9	10.5	12.2	14.4	17.6	21.2	25.4	30.9	34.6	40.1
C. GDP_{MP} (Rs billion)	854.6	957.4	1,041.6	1,146.0	1,358.1	1,594.2	1,775.9	2,072.7	2,295.4	2,617.3
D. A as a per cent of C	2.6	2.6	2.7	2.74	2.77	2.77	3.0	2.9	3.1	3.3
E. B as per cent of C	1.2	1.1	1.2	1.26	1.3	1.3	1.4	1.5	1.5	1.5

a/ Revenue plus Capital Expenditures.
b/ Excluding Central Grants to States.
c/ Education, Art, Culture and Scientific Research.
d/ Medical, Public Health, Family Welfare, Water Supply and Sanitation.
e/ Labour Welfare, Welfare of SC and ST, Consumer Subsidies, etc.
f/ Housing, Urban Development, Broadcasting, Calamity Relief, etc.
Source: Computed from Ravishankar.

The centre does play a role *via* what are known as "centrally-sponsored schemes" for specific interventions (such as the Integrated Child Development Services) or outright grants. In the Family Welfare sector, the centre has assumed a major responsibility. Although such contributions by the centre do make substantial difference, especially for the health sector, it does not contribute significantly to reducing inter-state disparities in access to the social services. Most of the centrally-sponsored schemes require matching contributions from the states so that the relatively less well-endowed states benefited the least from central schemes. Moreover, the centre's financial contribution to states' educational efforts remained negligible at less than one per cent until the mid-1980s. Although central grants accounted for over 20 per cent of total health

related expenditures, these were largely towards one sub-sector, i.e., the family welfare (including family planning) sector.

TABLE 12. PER CAPITA PUBLIC EXPENDITURE (REVENUE)[a] ON HEALTH BY STATES

	Per capita expenditure at 1980-81 prices		Rate of Growth	Life Expectancy		Infant Mortality	
	1976-77	1986-87		1976	1986	1976	1985
Andhra Pradesh	18.1	30.4	5.3	47.9	53.1	122	83
Bihar	8.7	15.0	5.6	42.3	46.0	NA	105
Gujarat	20.2	39.6	7.0	50.2	52.4	146	98
Haryana	20.4	37.5	6.3	52.9	54.8	112	85
Kamataka	20.0	23.2	1.5	54.5	56.3	89	71
Kerala	24.8	29.3	1.7	61.7	65.5	56	32
Madhya Pradesh	17.6	18.3	0.4	46.9	49.0	138	122
Maharashtra	20.3	44.7	8.2	53.5	56.3	83	68
Orissa	15.7	32.2	7.4	44.0	49.1	127	130
Punjab	24.1	32.8	3.1	58.4	60.5	108	71
Rajasthan	21.4	32.8	4.4	49.3	51.9	142	108
Tamil Nadu	22.9	33.3	3.8	50.3	53.4	110	80
Uttar Pradesh	10.0	19.1	6.7	42.8	46.2	178	140
West Bengal	22.0	25.4	1.4	49.6	52.0	NA	77

a Includes expenditure on family welfare and water supply.
Source: *RBI Bulletin*, (various issues).

Given the variation in the states' resource position, and the centre's peripheral role, it is not surprising that per capita expenditures on both health and education varied a great deal across states, and generally were very low in the states with the highest illiteracy and mortality rates (Tables 11 and 12). Expenditure per capita on health in 1986-87 in Bihar and Uttar Pradesh was less than half of most southern States and of Maharashtra. The centre's significant supplementation of States' efforts did result in changing the composition of health expenditures towards rural family welfare, but access in general remained very poor in the poorer states. Not surprisingly, infant mortality rates as well as children not at school remain very high in six major states, viz., Bihar, Assam, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh.

TABLE 13. PER CAPITA PUBLIC EXPENDITURE ON EDUCATION AND LITERACY RATES BY STATES

	Per Capita Expenditure in Real Terms (1980-81 prices)			Per cent Change from 1976-77 to 1986-87	Literacy Rates		Per cent Change from 1971 to 1981
	1976-77	1980-81	1986-87		1971	1981	
Andhra Pradesh	36.5	43.3	67.7	85.5	29	29.0	3.1
Bihar	17.9	34.0	37.0	106.7	33	26.2	-20.6
Gujarat	60.7	53.3	81.4	34.1	42	43.7	4.0
Haryana	46.1	56.0	66.6	44.5	32	36.1	12.8
Kamataka	41.6	46.8	65.4	57.2	37	38.5	4.1
Kerala	80.7	84.4	103.0	27.6	70	70.4	0.6
Madhya Pradesh	30.1	33.0	46.5	54.5	26	27.9	7.3
Maharashtra	47.3	61.2	79.6	68.3	46	47.2	2.6
Orissa	35.3	40.9	49.8	41.1	31	34.2	10.3
Punjab	61.6	82.8	81.7	32.6	39	40.9	4.9
Rajasthan	37.5	42.9	60.3	60.8	23	24.4	6.1
Tamil Nadu	42.3	48.5	59.1	39.7	45	46.8	4.0
Uttar Pradesh	27.5	31.7	42.1	53.1	25	27.2	8.8
West Bengal	34.9	45.3	68.0	95.4	39	40.9	4.9

Source: Computed from States' Bulletin of Statistics, (various years).

The 1986-87 NSS round included detailed questions on the utilization of publicly provided services at the household level, and tabulations of the results by deciles of persons ranked by consumption per capita of households are now available [for education see NSSO 1991; on health services see Minhas 1990]. From the point of view of the present discussion, the two salient points from these data are that: i) India's poorest few deciles do benefit from public spending; this is evident in the utilization rates of government schools and health services, which tend to be above average for the poor; ii) Nonetheless, the benefits of public spending cannot be said to be particularly well-targeted; for example, public spending per student on government schools tends to be much higher (by a factor of two to three) for the upper deciles [NSSO 1991, Table 6.1].

State-wise data on inputs and outcomes suggests that public spending variables have had an impact on neonatal, postnatal and infant mortality rates [Kakwani and Subbarao, 1991a]. Health outcomes also depended on literacy, controlling for all other factors. These findings underscore the importance of protecting, if not increasing, states' social sector budget allocations during adjustment, to ensure sustained progress.

In summary: India's poor have shared (albeit unevenly) in the benefits of public spending, and so they will lose from an undifferentiated budgetary contraction. Some key pro-poor components of existing disbursements can be identified.

II. SOME PROPOSITIONS ABOUT THE LIKELY SOCIAL IMPACTS OF ADJUSTMENT

The stylized facts above suggest the following propositions about adjustment and poverty in India.

Effects Operating through Price Changes

Proposition 1: The short-term impact of adjustment on living standards of the poor will depend in part on how the structure of consumer prices evolves over the coming years. The key prices to watch are those for food staples (rice, wheat, pulses, edible oils, vegetables) and domestic fuel. There are a number of reasons to believe that cereal prices will continue to increase in the near future, with adverse welfare effects for the bulk of India's poor. There will probably be downward pressure on some other food items, such as edible oils, though even then some of the poor will lose.

The following factors will probably lead to higher consumer prices for food staples in the near future even if we see good monsoons:

i) In the short-term, the cuts on subsidies to agricultural inputs will probably hurt the poor, *ceteris paribus*. The proposed targeting of the fertilizer subsidy (with the aim of only subsidizing fertilizer use by small farmers) is not likely to help greatly, even if it is administratively feasible; the poorest in India will be largely un-affected. The main impact of higher input prices will be felt through higher domestic food-staple prices.

ii) The issue prices of food-staple rations sold through the PDS will probably be raised to help cut subsidies (indeed, this has begun, in late 1991). While PDS is not particularly well targeted, many of the recipients are poor. When issue prices increase there is often pressure to pass some of this onto farmers in the form of higher procurement prices, with second round effects on market prices of food staples.

iii) The short-term effects of the devaluations are less clear. They will have an inflationary effect, though (given the relative size of the traded goods sector in India) probably only a modest one in the short-term. For now at least, the bulk of India's poor can be characterized as living in an essentially closed economy: they supply mostly non-traded goods and they consume mostly non-traded goods. But there will probably be some adverse effects on the poor stemming from the devaluations. An eventual transmission into some food-staple prices (such as wheat) would be consistent with past trends [Gulati and Pursell, 1991], with likely spill-over effects into substitutes, such as rice. And the food-staples often compete for the same land as externally traded cash-crops, such as cotton (and, indirectly, cotton products). Once supply adjusts through land allocation, this will put some upward pressure on the prices of food-staples. In due course, these (medium-term) losses will probably be compensated by employment effects stemming from the devaluation.

iv) External trade liberalization will put a sizable upward pressure on the main domestic food-staple prices (rice and wheat), although some food prices would probably fall, notably edible oils. Again, employment gains will mitigate these adverse welfare effects, but that will take time.

v) The recent sharp increases in fuel and freight costs will not only entail direct welfare losses to the poor, and also lead quite quickly to an increase in cereal prices in the deficit states, some of which, such as Bihar, also have high concentrations of India's poor.

The implications for food grain prices of most of these factors will also depend on the government's food grain stock changes. Currently public storage is quite high. There will be some potential for a short-term buffering of the living standards of the poor by releasing stocks through the PDS (which we will discuss further below) or simply by open market operations.

Any changes in the structure of indirect taxation must also be considered. Tariffs on imports account for a large share of government revenues (about 20 per cent in 1990-91) [EIS, 1990, Table 7.3]; and so cutting tariffs dramatically will almost certainly entail an expansion of other sources of revenue. The direct burden of import tariffs does not fall on India's poor; however, the burden of some of the alternative indirect taxes in India is thought to be fairly regressive. Care in tax design could go a long way toward mitigating adverse effects on the poor.

All these observations are based on the circumstances of a *typical* poor person in India; it should not be forgotten that the poor are heterogeneous in some relevant respects, and hence that there will be both losers and gainers from most shifts in relative prices. For example, one expected shift in prices, namely, the downward pressure on edible oil prices which would come with trade liberalization, could have quite adverse welfare effects on the poor in certain regions, where edible oil processing (which is quite unskilled labour intensive) is an important source of income. An expansion in demand for labour in other activities (such as in processing long-staple cotton, the price of which would rise) would mitigate this somewhat, and there will also be mitigating effects on the welfare of other poor consumers through lower edible oil prices (Table 7). The adverse effects on edible oil producers are of concern, though it is hard to say whether in this case the price change will be pro-poor even on balance. More generally, though, it should be noted that even a largely pro-poor shift in prices may leave some of the poor worse off.

Effects Operating Through Public Retrenchments and Privatizations

Proposition 2: The planned public sector retrenchments are not of great concern from the point of view of India's current poor. Equally, they will gain little from planned funding aimed at compensating those retrenched.

From Table 2 it is evident that a typical public sector employee (say a clerk or worker in a public enterprise) is likely to have an income well above India's poverty line. This is not the segment of the work force that one should be most concerned about from the point of view of regaining India's progress in poverty reduction.[31] It may still be that potential income losses to some public sector employees are so large as to impoverish them unless the retrenchment is accompanied by some safety net features, such as the proposed early retirement scheme. And there will be spill-over effects on both rural and urban poor, particularly in service sectors. However, all things considered, it is hard to believe that the public sector retrenchments are anything but a secondary issue from the point of view of India's poor.

Proposition 3: it appears likely that there will be some adverse short-term effects on employment of the urban poor, though the extent and significance of these effects is hard to predict.

The bulk of the relatively unskilled labour absorption in the India urban economy over the last ten years or so appears to have been in the informal manufacturing and services sectors (rather than organized formal industry or the public sector).[32] In the medium-term the poor in the unorganized sectors should benefit from the proposed reforms. However, in the short-term, jobs in these sub-sectors may depend in part on the fortunes of the formal sector, including those

firms and industries (including public enterprises) which are certain to contract or even disappear in the adjustment process. Furthermore, as we have seen, a typical worker in this sector is not far above the poverty line, and the distribution is quite spread, so it is plausible that the incidence of poverty in this group could be quite high, say at or near the average urban poverty incidence figures given in Table 1. Additionally, although the changes involved are small and it is too early to say if it is a change in the trend, the up-turn in the incidence of urban poverty noted earlier adds concern (stylized fact 2). Impacts of adjustment on the urban poor should be taken very seriously. There is, however, little immediate hope of convincingly quantifying effects of adjustment on the urban poor, though it is a researchable question.

Effects Operating Through Cuts in Social Sector Spending

Proposition 4: The impacts on living standards of the poor stemming from this adjustment will also depend on the adequacy of the social safety net, particularly through the food distribution system and public employment schemes. India has proven a number of times that it is capable of avoiding the sharp contractions in food purchasing power of the poor that had led to famine so often prior to Independence. The coming challenge is not fundamentally different.

At no time is the safety net function of PDS more important than now, given that the inflation rate has crossed 15 per cent following adjustment-related stress. Yet, past performance of PDS does not leave one with great confidence that it is geared effectively to meet the anticipated distress of the poor (stylized fact 8). PDS in the past did serve the indirect function of price stabilization, and this is probably pro-poor, at least when large fluctuations are dampened [Ravallion, 1987]. One can legitimately raise the issue of whether the same function of price stabilization could not have been realized more cost-effectively by policies other than PDS.[33] If it did serve the poor (as in states such as Kerala), one can again argue that the same objective could have been realized *via* works/employment generating programmes, raising incomes in the hands of the poor but leaving prices free.

PDS has expanded and it is now politically difficult to abandon altogether. About 15 million tonnes of food grains are being distributed and the subsidy cost now amounts to Rs 25,000 million. Given current economic stringency, and the potential adverse impact on poverty due to erosion of purchasing power, it is essential that such a large sum of money is spent more effectively and efficiently through better targeting, reduced leakages and overhead costs. A revamping of PDS has recently been announced, with a focus on serving 1700 priority blocks, but it is not at all clear whether specific targeting and cost containment policies will be adopted to realize the stated objective without enhancing the subsidy cost. If not, PDS will only exacerbate the strain on the budget - and thus on other more pro-poor sectors - without directly serving a poverty-alleviating role.

In an adjustment context, an attraction of the employment based schemes is that they can be both self-regulating and self-targeting, but achieving these benefits depends a lot on their design. The joint issue of the wage rate and coverage of a public employment scheme is crucial. For a given long-term budget, the choice is between a scheme which aims for wide coverage at potentially low wage rates, and one which rations participation at a wage rate sufficient to allow more participants to escape poverty. Ravallion has derived conditions for ranking policy alternatives for the design of such schemes in terms of their cost-effectiveness in reducing poverty [Ravallion, 1991b, Pp. 57-79]. For Bangladesh data, empirical simulations of the policy alternatives broadly support the case for wide coverage at low wage rates when the policy maker is concerned about *severity* of aggregate poverty. This can hold even when the non-wage cost per worker is quite high (though if that cost is very high, limitations on coverage will become desirable). Wide coverage tends to reach the poorest first and to enhance the insurance benefits to all of the poor. Both effects are desirable in an adjustment context. Arguments for rationed coverage at higher wage rates are more convincing when one is only concerned about the number of people who are poor, rather than the

depth of poverty.

This argument does assume that the policy maker can control the average wage rate on the scheme, so as to allow it to adjust to the long-term budget constraint. In circumstances in which the wage rate is pre-determined, employment cannot be guaranteed without losing control of the scheme's aggregate cost, and so potentially violating budget constraints. An unfavourable trade-off against poverty alleviation through economic growth may then be unavoidable. Such concerns have arisen about the higher statutory minimum wage rates applied to Maharashtra's EGS since mid-1988 [World Bank, 1989], though the sequence of good monsoons since then have helped keep participation and, hence, cost down. There is compelling evidence that the higher wage rates were not accompanied by the extra budgetary resources needed to maintain the employment guarantee; the result was that the available work had to be severely rationed, and many who needed it had to go without [Ravallion, Datt and Chaudhuri, 1991].

The lesson for the use of such schemes to compensate losers from the adjustment is clear. The idea of assured employment does have appeal as part of a poverty alleviation programme, particularly when it allows scarce resources to go to the poorest first, or at least those able to work. An employment guarantee can also yield important insurance benefits to the poor, which will be particularly important in a transition period. However, realizing these benefits must entail a wage rate consistent with budgetary resources. Increasing the wage rate without the necessary resources need not be in the interests of the poor. The budget for such a scheme should be set in consideration with other policy objectives, including the alleviation of other aspects of poverty, such as poor health or inadequate schooling.

The effects of the wage increase on the Maharashtra EGS illustrate the risk for a national EGS of imposing statutory minimum wage rates above prevailing wage rates for similar work. Here we would agree with Dandekar that policy makers should be wary of allowing the wage rate and conditions of work to be justiciable in such schemes [Dandekar, 1991].

In our view, serious attention must also be given to the adequacy of the existing social safety net in protecting the *urban* poor. The following observations can be made: There is no very obvious reason why well-designed relief work schemes could not be just as successful in urban areas. And there is clearly plenty of work to do, particularly in housing and public service rehabilitation. There might also be some scope for combining such schemes with basic training (literacy classes for adults, for example) which could complement the longer-term process of poverty reduction, post-adjustment.

Much will also depend on what other aggregate shocks happen during the adjustment period. India has had four good monsoons in a row. One or two monsoon failures combined with rising domestic food-staple prices through the process of macroeconomic adjustment could lead to a sizable increase in the incidence and severity of poverty *unless* the social safety net is effective in protecting the real incomes of vulnerable groups.

In summary: compared to many other countries at similar average income levels, India has a quite well developed social safety net. While it still has holes, it has been instrumental in avoiding famine over the last 40 years or so.[34] That is an achievement which speaks well for the *potential* for protecting the poor during adjustment. Some elements of the existing safety net are better equipped than others for that task. The reforms to PDS that have been underway or proposed could help greatly in achieving better targeting and in reaching vulnerable rural groups. The employment based schemes can be set up in a way which is both self-regulating and self-targeting, though this depends crucially on the wage rate, which should not exceed the going wage rate for unskilled manual labour. The imposition of statutory minimum wage rates well in excess of market clearing levels could greatly undermine this potentially important policy instrument; it is the poor who will ultimately loose. These schemes have tended to be confined to rural infrastructure development, though that is not essential. Some other elements of the existing set of poverty alleviations schemes, such as IRDP, are probably less well suited to a short-term adjustment setting.

Proposition 5: Fiscal contraction is likely to reduce central transfers to the states in real terms in the near future. If the states, in turn, reduce real expenditures on all sectors proportionately, then social spending (and consequently social welfare indicators) could worsen, particularly in the states already recording slow progress. But much also depends on the states' management of their own resources.

Past experience suggests that (as a rule) states' allocations to social sectors improved in those states where internal fiscal discipline was maintained. Ravishankar reports a significant negative correlation between the ranking of states in ascending order of indebtedness and that in terms of social service spending [Ravishankar, 1988]. In fact, in the states with the lowest debt service ratio, there has been a steady (if slow) increase in government spending on the social sectors. An interesting coincidence is that this has happened by and large in the states which were ruled by the opposition parties, suggesting the role of political factors (discussed below).

Although states' own resources fund most of social sector investments, the real flows may be affected indirectly, if central allocations to the states decline following overall fiscal contraction. States' own fiscal efforts may also contract. There has been some assurance from the central government that their own share of social funding would be maintained. Even so, if central flows to the states decline, as is most likely, there are three scenarios for the social sectors: (a) state governments contract their spending on all sectors proportionately; (b) they maintain social sector spending, but reduce spending on other sectors more than proportionately; and (c) they maintain other sectors' spending, but reduce social sector spending more than proportionately.

For the poor states, scenarios (a) and (c) have potentially alarming implications for social welfare outcomes. A proportionate decline in spending would amount to reversing the already slow progress in social indicators in the poor states. The most likely possibility (already reported in some urban hospitals and rural schools) is that salaries to staff will be maintained, but cuts will begin to plague medical supplies (drugs), equipment and school inputs. It is well known that the quality of social services is already very low in these states; clearly it will worsen with the drying up of supplies. Even if social spending is maintained (scenario b), progress in the poorer states may halt, because research bearing on inputs and outcomes reported above clearly implies that incremental gains can be obtained only from improved allocations, *ceteris paribus*.

Public spending cuts in basic health services will probably have quite short lag time in affecting health outcomes. While we know of no comparable estimates for India, a long time series analysis of the effects of changes in public health spending on infant mortality in Sri Lanka indicates strong effects in the current year, as well as sustained lagged effects [Anand and Ravallion, 1982].

The overall conclusion from the above argument is that the outlook for the social sectors from adjustment-related contraction is unlikely to be favourable, whatever scenario one postulates.

We have ignored the political factors which explain a part of the historical differences among the states with respect to relative priority accorded to the social sectors. For instance, states which spend a higher than average proportion on social services (e.g. Kerala, West Bengal, Andhra Pradesh and Tamil Nadu) have the tradition of being ruled by opposition parties, who seem to face greater pressure to spend higher amounts on social services. This clearly is not possible unless financial discipline is maintained, or else spending on economic services may have to be cut. However, in recent years (in both opposition-led and ruling party-led states) financial constraints, more than political factors, seem to have dominated social service spending. Adjustment related stress is likely to exercise a more dominant influence on the states' social service spending than political factors in the near future.

Proposition 6: Protecting and or improving financial allocations to the social sectors can help only if the composition of expenditures shifts significantly towards services which benefit the poor.

While there is a compelling case in our view for protecting certain categories of social sector spending during adjustment, the composition of social sector spending is crucial. The problems encountered in the social sectors are not merely those of inadequate aggregate spending but also of inappropriate spending and low operational efficiency. The problem of underfunding of primary and secondary education, and primary health care, relative to spending on tertiary levels, has remained unresolved. For example, the share of different levels in total education spending remained virtually unchanged over the period 1977-87 [World Bank, 1989]. Contrasting country experiences, [Colletta and Sutton, 1988] show that to achieve the goal of universal attendance, the share of primary education would have to be about 60 per cent of total expenditure, compared to less than 40 per cent in India.

There is pervasive inappropriateness in programme design and inefficiency in delivery. Improving allocations will not serve any purpose if the prevailing levels of inefficiency persist. While financial stringency is real and immediate for the poorer states, more spending does not necessarily improve the situation, since quality of services (as much as quantity) is rather weak in these states. For example, poor quality is extensively documented for family planning [Stout, 1988], health [Chatterji, 1990], nutrition [Subbarao, 1990] and public works [Hirway, 1986b]. As Heaver points out, the health professionals who have worked in rural areas have had the experience of being supervised badly: typically the visits by supervisory staff are flying visits to inspect records, deliver a speech and disappear, without ever diagnosing the problems encountered at the village level and offering any advice to the field staff [Heaver, 1991]. Quality of services of course varies a great deal across the states. In the states where the quality of supervisory staff is much superior, there is a threat that retrenchment of staff following a budget crunch might damage the efficiency of service delivery. While a discussion of choices for improving the quality of social service management, and regional differences thereof, is beyond the scope of this paper, protecting allocations to these sectors must be intertwined with measures to improve service delivery. Given the pressure on public resources, the state governments should now focus their expenditures on those services which have the largest externalities, e.g., family welfare including family planning, nutrition interventions, and primary education, leaving scope for the private sector to provide tertiary level services in education and health. Appropriate incentives must be built into programme components to reward (and thus ensure) quality in service delivery.

III. CONCLUSIONS

The potentially adverse impacts on human development in India associated with the adjustment process are expected to dissipate in time, as the benefits of adjusting (relative to not adjusting) are felt. Nonetheless, the short-term distress could well be severe for some.

Adverse impacts in the short-term can, however, be mitigated by timely and constructive public action, and this can probably be done without slowing down the moves towards greater economic efficiency - and longer-term poverty reduction through growth - implicit in the adjustment policy framework. The twin objectives for such public action are (i) income support for poor households hurt by adjustment in the short-term, and (ii) protecting access to essential social services during the adjustment period.

Toward the first objective, improved targeting of the Public Distribution System would help, by re-directing subsidies toward poorer areas, and improving targeting within those areas. There is also scope for increased spending on labour intensive infrastructure projects to provide relief work in both urban and rural areas. Demand for such work should dissipate as the adjustment period ends. Care should also be taken to avoid tax increases or subsidy cuts on basic wage goods.

Towards the second objective, the aim should be to avoid cuts in real spending on basic social services - preventive health care, primary and secondary education - and to increase spending in lagging states. Care should be taken to maintain both wage and non-wage inputs to these services. Central funding arrangements should try to create incentives for state governments to protect allocations to key services, and to improve efficiency.

These measures could never guarantee that none of India's poor suffer during adjustment, but they could help protect many.

NOTES

1. For a discussion of these and other aspects of the methodology of poverty comparisons using household level data see Ravallion [1992].

2. Though the 42nd round (1986-87) did collect data on this; see Minhas [1990].

3. The sample sizes in the NSS surveys for 1986-87 and 1988-89 are considerably smaller than for other years. The sample sizes are as follows:

	Rural	Urban
1983	75,913	41,983
1986-87	16,626	9,135
1987-88	41,597	22,703
1988-89	15,003	9,595

We will, of course, allow for these differences when testing the statistical significance of the comparisons across years and sectors.

4. See Bardhan [1970, Pp. 129-136] and Dandekar and Rath [1971].

5. For a discussion of the choice of price deflators see Kakwani and Subbarao [1991b, Pp. 1482-86]. For further details on the estimation methods for the poverty measures see Datt and Ravallion [1991a].

6. This is the FGT measures for $\alpha = 2$, and it is "distribution sensitive" in that inequality increasing transfers amongst the poor will increase poverty. The general class of FGT poverty measures takes the form:

$$P_\alpha = \sum_{y_i < z} [(z - y_i)/z]^\alpha / n$$

where y_i is the consumption of the ith person (estimated by the consumption per capita of that person's household), z is the poverty line, n is population size and α is a non-negative parameter. The head-count index is obtained when $\alpha = 1$.

7. Also see Minhas *et al* [1991, Pp. 1673-1682] for alternative estimates up to 1987-88. We shall comment on key differences between these estimates and ours below.

8. Let H_i denote the head-count index for data or sector i. To test the null hypothesis that $H_A - H_B$ in distributions A and B from random samples of sizes n_A and n_B one calculates the test statistic $t = (H_A - H_B)/s$ (with a normal distribution) where s denotes the standard deviation of the sampling distribution of $H_A - H_B$ which (under the null hypothesis) is given by:

$$s = \sqrt{\{H \cdot (1 - H) \cdot (n_A^{-1} + n_B^{-1})\}}$$

where $H = (n_A H_A + n_B H_B)/(n_A + n_B)$; see, for example, Hamburg [1977]. If the calculated value of t has an absolute value less than 1.96 (2.58) then the difference in head-count indices between two dates, say, cannot be considered statistically significant at the 5% (1%) level using a two tailed test. The values of the test statistic are as follows:

	Rural	Urban
1983 to 1986-87	16.6	3.5
1986-87 to 1987-88	1.0	-2.4
1987-88 to 1988-89	0.2	0.2

9. There are some comparability problems amongst these surveys, particularly involving the first two rounds, which we have not considered. The series is still probably adequate for detecting any trends over time. For further discussion see Datt and Ravallion [1991a].

10. Though these first few surveys are of more questionable quality, there are signs of increasing poverty in the early 1950s from other sources. Ghose [1980, Pp. 413-428] gives estimates of the real total earnings of agricultural labourers in India suggesting a decrease between 1950-51 and 1956-57 in a number of states.

11. The test statistics are 17.4 (for 1983), 0.2 (1986-87), -4.4 (1987-88), and -2.8 (1988-89).

12. However, the relationship is rarely a simple additive one, and so there is also an interaction effect between growth and redistribution effects on poverty; see Datt and Ravallion [1991a]. Note also that the usual inequality measures, such as the Gini index, can be misleading in this context. One certainly cannot conclude that a reduction in inequality (by any well-behaved inequality measure) will reduce poverty. And even when a specific (increase) in inequality does imply a reduction (increase) in poverty, the change in the inequality measure can be a poor guide to the quantitative impact on poverty. A time series of an inequality measure can be quite uninformative about how changes in distribution have affected the poor. On the decomposition method used here see Ravallion and Huppi [1989, 1991] and Datt and Ravallion [1991].

13. See the exchange between Tendulkar and Jain [1990] and Kakwani and Subbarao [1991b].

14. See Datt and Ravallion [1991c] for an estimate of the contribution of distributional shifts during the drought. For micro-level observations on the role of policy intervention through price stabilisation and employment programmes see Bidinger *et al* [1991, Pp. A105-A114]. Also see GOI [1989].

15. These are Instrumental Variables (IV) estimates allowing the error process to have first-order serial correlation. This estimator avoids two sources of bias: i) Measurement errors in the underlying NSS distributions will tend to produce a negative correlation between the dependent variable and the right hand side variable even if none exists in reality. ii) There may be omitted variables which are serially dependent. The IV's used were the previous values of the dependent variable, the means in both urban and rural areas, and a time trend. The regressions were subjected to a number of diagnostic tests, and performed satisfactorily. However, no allowance was made for the gaps in the time series, as it is unclear what the effect of this would be, or what action should be taken.

16. These are from different data sources. The child undernutrition rates are drawn from household-level anthropometric surveys conducted by the National Institute of Nutrition. For an analysis of these data, see Subbarao [1989]. The head-count index of poverty gives the proportion of individuals living in households with average consumption expenditures below a commonly assumed poverty line, as estimated from the NSS for 1983 by Kakwani and Subbarao [1991b].

17. Also see World Bank [1990, Chapter 2].

18. An ordinary least squares regression of a suitable non-linear transformation of child under-nutrition incidence (CU) against the head-count index of poverty (H, in per cent) gives the following result (with t-ratios in parentheses):

$$\log [CU/(100-CU)] = -3.20 + 0.028H \quad R^2 = 0.62$$
$$(10.18)\ (4.00)$$

The mean elasticity (given by 0.028H (1-CU/100)) is 1.01 and the range is from 0.59 to 1.54 (corresponding to the lowest and highest H respectively).

19. Average state income is insignificant when added to the regression reported in the last note, and H remains significant. Nor, indeed, is there any significant correlation between child undernutrition and state average income.

20. See the work of Dharm Narain, discussed in Desai [1985], and other papers in Mellor and Desai [1985], including Ahluwalia [1985], and Sen [1985]. See also Saith [1981]. One criticism of the Narain-Saith specification is that it involves regressing a real variable - a poverty measure - on a nominal variable - the price index. One can interpret this a mis-specification, in which prices determining nominal incomes of the poor are omitted variables, of which the most important is the agricultural wage rate; see van de Walle [1985, Pp. 429-439].

21. See Boyce and Ravallion [1991, Pp. 361-376] for further discussion.

22. For further discussion and references see de Janvry and Subbarao [1987]. For recent evidence, see Acharya Papanek [1990].

23. Although again based on Bangladesh data, Ravallion's [1990a, Pp. 574-585] estimates are probably indicative of what one could expect to be the case in much of India.

24. For example, a common Bengali word for describing famine is "durbhiksha" literally meaning that "alms are scarce". See Epstein [1967], Sen [1981], Greenough [1982], Ravallion [1987], D'Souza [1988], and Dreze and Sen [1989].

25. Coate and Ravallion [1991] have studied the way informal insurance arrangements work in a simple model which highlights their limitations as risk-sharing arrangements in situations where contracts are difficult to enforce.

26. See Townsend [1991] and Chaudhuri and Ravallion [1991].

27. For further discussion see Nayak [1991, Pp. 1993-1997].

28. For further discussion, with reference to India's indirect taxes, see Ahmad and Stern [1989, Pp. 1829-1834].

29. See, example, Subbarao [1985], Hirway [1988], Pulley [1989], World Bank [1989], Gaiha [1990], Dreze [1988] and Seabright [1991, Pp. 327-350].

30. For a survey of the theory and evidence on these schemes see Ravallion [1991a].

31. Though it may be argued that, unless this group is compensated, the longer term transition to a pro-poor development path may be de-railed. This assumes that those threatened with retrenchment have sufficient political power. We are unsure, though that does not mean we dismiss the argument.

32. Over the first half of the 1980s, employment in the unorganized (informal) manufacturing sector grew at 5.5 per cent per annum, compared to about 4per cent per annum in the organized sector [Subbarao, 1986; Hanson and Sengupta, 1988].

33. For further discussion in the context of famine relief see Ravallion [1987, Chapter 7].

34. The drought in Western India in 1987 is an example; on the policy response see GOI [1989] and for evidence on the overall distributional effects see Datt and Ravallion [1991c]. Also see Dre'ze [1990] and Dre'ze and Sen [1989].

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EVOLUTION OF AGRARIAN RELATIONS IN INDIA

H.R. Sharma

The acquisition of zamindari rights by the East Indian Company over the three villages in 1698 and then the purchase of the Diwani of Bengal in 1765 marked a major break in the agrarian relations of Pre-British India. The Britishers in their initial years experimented with various modes of revenue collection which ended with the introduction of zamindari, ryotwari and mahalwari tenures. While zamindars and their functionaries had a complete sway in the zamindari areas, the self-cultivators also had an important place in the ryotwari and mahalwari areas. Despite these differences, agrarian relations under all the tenures were characterised by extremely skewed distribution of land, exploitative tenancy arrangements, usury and forced labour. The net result was the impoverishment of peasantry and stagnation in agricultural production. It is against this background that agrarian reforms policy of post-independent India matured through the recommendations of numerous Committees, Commissions and Five Year Plans. Broadly, three types of legislations viz., Abolition of Intermediaries, Tenancy Legislation and Ceiling on Landholdings were enacted to give practical shape to the various aspects of agrarian reforms policy. While the laws abolishing intermediaries have been implemented fairly efficiently, those relating to tenancy and ceiling on landholdings have fallen short of proclaimed policy

AGRARIAN RELATIONS ON THE EVE OF THE INTRODUCTION OF PERMANENT SETTLEMENT

The agrarian relations of pre-British India were part and parcel of self- sufficient village communities which functioned on the basis of hereditary division of labour marked by close integration and harmony between agriculture and handicraft. The only authority these communities recognized was the king whom they paid 1/6th to 1/4th of their produce in ancient period and 1/4th to 1/3rd (1/2 in Aurangzeb's time) in Mughal period. The share was governed by custom and was known as customary rate or 'pargana rate'. This was collected by certain intermediaries who paid 9/10th of the revenue collected to the government, keeping the rest as a reward for their services. In some cases, they were also allotted estates or jagirs in recognition of their services or were authorized to keep the collection of revenue from certain estates as their remuneration.

These revenue farmers, intermediaries between the king and the cultivators (khudkasht), variously came to be known as zamindars and jagirdars in Bengal, taluqdars in Agra, khot in Konkan of Deccan Peninsula, jagirdars, inamdars, and taluqdars in Bombay, malguzars in Central Provinces (Madhya Pradesh), lambordars in Punjab and polygars in South Madras. The khudkasht cultivators enjoyed hereditary rights on their holdings without the fear of alienation, eviction and rack-renting [Mukherjee, 1940, Vol. II, Pp. 129-240], [Mukherjee, 1952, Pp. 1-2] and [Habib, 1982, Pp. 48-76]. Land transfers and absentee landlordism were unknown in these communities, where cultivator's hold on land was primarily in terms of possession than that of ownership. Transfers of land took place in terms of gifts to religious institutions or for want of heirs. However, the transfers left the possession of the lands undisturbed. The system worked in such a way that it discouraged absentee landlordism [Mukherjee, 1957, Pp. 15-27]. The land was used for subsistence production rather than for profit making and as a commodity to be freely sold.

The agrarian structure of pre-colonial India was thus characterised by self-possessing, self-working and self-sufficient village communities where the terms like production relations in terms of landlords, share-croppers, and tenants-at-will were unheard of [Mukherjee, 1957, p. 27]. The agrarian relations in these communities were rooted in the century old customs and traditions and not in statutes [Thorner and Thorner, 1962, p. 5]. The most salient feature of the agrarian relations that prevailed in the country from ancient time to Mughal empire was the fact that the despots and tyrants, the zamindars and the

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jagirdars and all men at top were concerned with the development of agriculture, reclamation of waste land and construction of roads [Sen, 1962, p. 53].

In the later days of decaying Mughal empire, the right to zamindari could be obtained from the emperor's representatives. Thus the East India Company acquired the zamindari rights over the villages of Calcutta, Sutanati, and Gobindpur in the year 1698 and appointed Ralph Seldon as the first alien zamindar of these villages. The replacement of native zamindars with the alien, 'was the first major breach in the existing land relations' [Sen, 1962, p. 57]. The break was of tremendous historical, political, social, and economic significance as was borne out by the subsequent developments. The purchase of Diwani of Bengal in 1765 was yet another landmark in the development of agrarian relations in the country.

In the initial years, the Company continued the hierarchy for revenue collection they inherited from the Mughal regime. Subsequently, several methods were tried to collect the revenue, e.g., appointment of supervisors (1769), introduction of quinquennial settlements (1772), decennial settlements (1789), and the distribution of revenue collection rights through public auction to the highest bidders for five years. The purpose was to squeeze out maximum revenue from the peasantry: revenue collected increased from £ 1,476,000 in 1765-66 to £ 2,680,000 in 1790-91 [Mukherjee, 1973, p. 42]. In between came the devastating famine of 1770 which reportedly depeopled one third of total and 50 per cent of agricultural population rendering large part of cultivable area waste. This was followed by the famines of 1784, 1787 and 1790. These natural calamities combined with the revenue hunt of East India Company inflicted untold miseries on the starving peasantry. As a consequence, Fakir and Sanyasi rebellions broke out during 1772 to 1789 [Sen, 1962, p. 60]. The exhaustion of the country and its people was so naked that Cornwallis declared in 1789, 'I may safely assert that one third of the Company's territory in Hindustan is now a jungle inhabited only by beasts' [Mukherjee, 1973, p. 43].

Introduction of Zamindari, Ryotwari and Mahalwari Land Tenure Systems

The situation urgently called for remedial measures not only to stabilise revenue collection but also to revitalise agriculture and save the Indian markets from getting ruined and pauperised. Hence, Lord Cornwallis introduced the celebrated permanent settlement (zamindari system) through the Regulation II of 1793. Under the settlement, zamindars, the erstwhile revenue collectors, were declared the proprietors of the soil on the condition of payment of a fixed amount of revenue which was fixed in perpetuity[1]. The land revenue demand was fixed at 90 per cent of the rental value of their estates leaving 10 per cent as their remuneration. The zamindars were empowered to enhance the rent on the grounds of any improvement in agriculture. While introducing permanent settlement, Lord Cornwallis visualized the steady flow of revenue on the one hand and inducing moneyed men to undertake much needed capital investment to rehabilitate the agriculture on the other. Besides this, English rulers, through introducing the concept of private property in land, sought to create an ally of the people who would be attached to the British regime from a motive of self-interest. It has also been argued that the Company by this arrangement sought to keep India as an agricultural economy appendaged to the British industrial empire[2] [Mitra, 1951, Vol. VI, Part 1A, p. 439]. History has shown that while the objective of maximisation of revenue was fulfilled, the second (to revitalise the agriculture) was not and agriculture continued to languish as before [NCA, 1976, Vol. XV, Pp. 3-4]. The revenue to be paid by the so-called proprietors of the soil to the government was fixed in perpetuity but the rent to be paid by the cultivators to the landlords was left undefined due to difficulties in deciding the prevailing 'pargana rate'. It was expected that the security of tenure against rent enhancement would be ensured through regulation which stated that rent charged would not exceed the 'pargana rate' which would be entered in the 'pattas' to be provided to the raiyats by the zamindars. But these benevolent intentions of Lord Cornwallis did not materialise because of no clear cut definition of 'pargana rate' in the Regulation [Floud, 1940, Vol. I, p. 16]. The division of rights between the raiyats and zamindars remained undefined even in the later Regulation of 1802 vide which

zamindari system was extended to Northern Madras. It was assumed that zamindars would collect half the produce and pay two-thirds of it to the government as 'Pakshas'. But the actual collections by the zamindars were very high and cultivators' share had been reduced from 1/3rd to 1/5th [Dharma Kumar, 1982, p. 218].

Thus, the peasants' position was made extremely vulnerable and was left to the whims of zamindars *ab initio*. Commenting on the introduction of permanent settlement and the resultant status of raiyats, Patel remarked: 'By the force of authority of the British government in India, millions of cultivators in these three provinces of Bengal, Bihar, and Orissa were transformed, almost overnight, from the peasant proprietors into tenants-at-will. In the whole history of mankind one would look in vain for a parallel to this classic example wherein so many were sacrificed in such a short time so that few may prosper and rule'[3] [Patel, 1952, p. 44].

Under the provision of settlement, the zamindars were obliged to pay the land revenue to the government within a stipulated period and non-payment of revenue could lead to the confiscation of their estates. Many zamindars failed to cope with the task to pay the revenue within the stipulated date and time. Several factors contributed to it. The notable among these were (i) incompetence of the zamindars in managing their estates; (ii) falling agricultural prices between 1794-1797; (iii) high pitched revenue demand collected with unprecedented vigour; (iv) languishing peasantry; and (v) firmly entrenched intermediaries between the zamindars and the peasants [Chaudhuri, 1975, Pp. 2-5 and Dutt, 1976, Pp. 230-233]. The mounting arrears led to the auctioning of many estates and, thereby, accelerating the pace of land markets; revenue from the estates sold in Bengal and Bihar increased from Rs 8 lakh in 1793-94 to Rs 38.6 lakh in 1798-99 (Table 1). In Orissa, 51.6 per cent of 3,000 proprietors of the first settlement of 1804-05 were wiped out between 1804-1818 and the estates which remained contributed 21.5 per cent of the revenue demand fixed in 1804 [Chaudhuri, 1982, p. 96]. The massive auctioning of the estates and difficulty in realising rent from the cultivators led to enactment of notorious Haptam (Regulation VIII of 1799) which vested sweeping powers in the hands of zamindars to realise rent arrears from raiyats.

TABLE 1. AUCTION SALES IN BENGAL AND BIHAR, 1793-94 TO 1806-1807

Year	Revenue of the Estates (Rs Lakh)	Percentage of the Revenue of Affected Estates of the Provinces
1793-94	8.00	2.90
1794-95	7.60	2.80
1796-97	14.10	5.20
1797-98	22.70	8.20
1798-99	38.60	14.20
1799-1800	7.70	2.80
1803-04	5.50	2.05
1804-05	3.30	1.20
1805-06	1.30	0.48
1806-07	3.20	1.10

Source: Binay Bushan Chaudhuri, 'Land Markets in Eastern India, 1793-1794, Part 1: The Movement of Land Prices', *The Indian Economic and Social History Review, Vol. 12, No. 1.*, 1975, p.6.

This led to rack-renting. At the time of the introduction of Permanent Settlement the only constraint in increasing the rent was the fear that the farmer would leave the land and run away [Chaudhuri, 1977, Pp. 308-390]. In 1801 the Midnapore Collector, Mr. Enst, found the 'rent of land so high in this district and ... in most parts of Bengal that unless a ryot contrives to get more than he pays rent for, or some deductions from the full rates, it is impossible that all malguzari (rent paying) land he can cultivate can afford him a subsistence' [Chaudhuri, 1982, p. 96].

The zamindars, encouraged by the difference between the land revenue to be paid to the government and rent to be collected from the farmers, indulged in the practice of sub-infeudation rather than evincing any interest in the development of agriculture, as was originally anticipated by the authors of Permanent Settlement. The number of such intermediaries reached fantastic proportion which according to the Simon Commission was as high as 50 or more in some cases [Floud, 1940, Vol. I, Pp. 36-37]. The following interests in land, in descending order, existed below the zamindar proprietor: (1) Taluk (2) Nim Taluk (3) Osat Taluk (4) dar patni and osat patni (5) nim osat taluk (6) dar nim osat taluk (7) miras ijara (8) etman (9) mudefat (10) hoala

or jimba (11) Osat hoala (12) nim hoala (13) Osat nim hoala (14) dar osat nim hoala (15) ryot (16) nim ryot (17) Osat nim ryot and (18) dar Osat nim ryot. According to another estimate the army of people living on rent increased by 62 per cent between 1921 and 1931. Likewise, the Cess Report of the Revenue Board (1900) noted that the zamindars obtained approximately Rs. 16.5 crore from the cultivators of Bengal, Bihar and Orissa, while under the arrangements of 1793 they ought to have obtained Rs. 40 lakh only [Malaviya, 1954, Pp. 124-126 and Mukherjee, 1973, Pp. 34-35].

Thus the introduction of zamindari system in the words of Land Revenue Commission led to the process of sub-infeudation and rack-renting of the peasantry and the evils of absenteesm; of management of estates by unsympathetic agents; of unhappy relations between landlords and tenants and of multiplication of tenure holders of middlemen between the cultivators and the government [Mukherjee, 1952, p. 9].

The Select Committee set up by the House of Commons in 1830 observed, 'In the permanently settled areas nothing is settled and little is known about the government assessment'. This was attributed to the error of assuming that the rights of parties claiming interest in land were sufficiently established by the custom and the usage of the country to enable the courts to protect the individual rights [Floud, 1940, Vol. I, p. 23]. Under the system, intermediaries gained at the cost of both actual cultivators and the state. The actual cultivators suffered because of rack-renting and the state lost because of permanently fixed revenue. Thus, the concept of permanent settlement fell into disrepute. A more stable and elastic system in terms of revenue was found in the ryotwari system under which government entered into an agreement with the individual cultivator who was recognized as a proprietor with a right to sublet, mortgage, and transfer the land by gift or sale and who could not be ejected from the land as long as he paid the fixed assessment to the government [NCA, 1976, Vol. XV, p. 4]. According to some observers, this was an attempt to recognize the severality form of village tenure and to create peasant proprietorship [Patel, 1952, p. 46].

The ryotwari settlement was first introduced in the district of Bramahal of Madras Province by Captain Reed and Thomas Munro in 1792. The initial assessment, which demanded half the produce, was extremely severe and oppressive[4]. Subsequently, in 1807, the assessment was proposed to be reduced to one third of the produce but could not be effected due to insistence for higher revenue demand from the Company. The ryotwari settlement was further extended to other parts of the province which were not covered under the zamindari system[5]. Under the subsequent settlement, the revenue demand was lowered to 50 per cent of the gross produce on wet and 33 per cent on dry lands. Even the one-third assessment represented the entire economic rent in many cases and proved extremely oppressive. The high revenue demand coupled with cruelty, corruption, and unrecorded depredations of revenue collecting officials inflicted untold miseries on the peasantry. Commenting on the plight of cultivators, Dutt remarked: 'Modern history scarcely furnishes a parallel to such an arrangement under which a large industrious and civilized population were rendered incapable of improving their conditions or acquiring agricultural wealth, by a system of assessment which was kept upto the highest paying capacity of country from year to year' [Dutt, 1906, p. 78].

The oppression of the cultivators continued unabated until 1855 when a comprehensive survey settlement was initiated. Under the new settlement, the assessment was determined taking into consideration the value of crops net of cultivation cost which was a better indicator of the surplus available with the ryots and one half of it was fixed as a revenue rate. Besides this, factors such as revenue rates of the past thirty years, changes in the cultivation, irrigation, and so on were also considered. This system formed the basis of all future settlements to be made after every thirty years. The practice of re-assessment was finally abandoned in 1937.

The ryotwari system was extended to Bombay and Central Provinces after the annexation of these provinces from Maratha rule in 1817-18. Initially, the Britishers adopted the oppressive revenue rates of Maratha rule. Consequently, peasantry suffered, people were impoverished,

villages deserted and much cultivable area was rendered waste. Subsequently, under Pringle's scheme, which was first introduced in 1830 in Indapur Taluka of Maharashtra, revenue was reduced to 55 per cent. Soils were classified to ascertain gross and net produce before fixation of the revenue assessment. The scheme did not function properly; there were complaints of collusion between officials and mirasdars (landlords) and consequent under-assessment of mirasdar's lands and of over-assessment of upris' (outsiders who had taken land on lease) lands [Fukazawa, 1982, p. 185]. The scheme was, therefore, abandoned and replaced with Bombay Survey System under which the settlement (i) was based on each field separately; (ii) granted a long lease for thirty years, and (iii) replaced estimates of produce by the value of lands as the basis of assessment [Dutt, 1906, p. 62]. The system took 66 years to be completed and introduced in all areas under the British regime and formally instituted the ryotwari tenure in Bombay Presidency. Under the settlement miras and upari tenures were merged and the assessment was fixed for thirty years. It also assured that no additional taxes would be imposed and the cultivators would be allowed to reap the rewards of any improvement they made on the land [Fukazawa, 1982, Pp. 185-186].

The revision of settlement in 1860s led to a great increase in the assessment; 42 per cent in Dharwar, 54 per cent in Khandesh, and 50 to 60 per cent in several talukas of Poona. Between 1856-57 and 1870-71, the land revenue of Bombay Presidency increased by 37 per cent and by another 18 per cent by 1890. The increase in the assessment, the famine of 1866-67, crop failures of 1867-68 and 1870-71 and the famine of 1899-1902 made the conditions of peasantry miserable and led to agrarian unrest and revolts of which Bardoli Satyagraha is notable.

A third type of land tenure, called Mahalwari Settlement, was introduced in certain parts of United Provinces, namely, Agra and Avadh, and subsequently extended to Punjab - after it was annexed to the British dominion in 1846. Under this tenure, the settlement was made with the entire village or Mahal and the peasants contributed to the total revenue demand for the village or Mahal on the basis of their respective holdings in the area. Regulation of 1822 entitled the state to as high as 83 per cent of the gross rental of the estate which was subsequently lowered to 66 per cent in 1833. The settlement was made for thirty years. The state demand was further reduced to 50 per cent of net produce or net rental value of an estate under Rule XXXVI of Sharanpur Rules in 1855. Land tax in Punjab was fixed at half of the gross produce in 1846-47 which continued upto 1856-57 when it was lowered to one fourth then to one sixth of the gross produce [Dutt, 1906, Pp. 34-92].

Thus, the major land tenure systems prevalent were the Permanent Settlement, Ryotwari Settlement, and Mahalwari Settlement. Zamindari System, covering the complete states of Bengal, Bihar, Uttar Pradesh, except Avadh and Agra, 81 per cent of privately owned land in Orissa, 27 per cent in Madras, 9 per cent in Assam and 7 per cent in Bombay accounted for 57 per cent of the total privately owned agricultural land in the country. The Ryotwari system which covered 93 per cent of the privately owned land in Bombay, 73 per cent in Madras, 91 per cent in Assam and 59 per cent in Madhya Pradesh accounted for 38 per cent of total privately owned agricultural land of the country. The remaining 5 per cent of the total privately owned land was under the Mahalwari tenure [NCA, 1976, Vol. XV, p. 6].

Rise in Indebtedness and Land Transfers

Prior to the introduction of British land settlements, land was inalienable and had hardly any market. The Royal Commission on Agriculture reported that, to the farmers, 'land was totally valueless unless they cultivated it, it had no market price, for no one would buy it or make advances upon it as security, so that their recourse was to become pauper and perish' [RCA, 1928, p. 9]. Even in those areas where land was individually owned and cultivated, the cultivators were rarely allowed to sell their land [Baden-Powell, 1899, p. 424]. With the introduction of British land tenure system, the transfer of land was legalised, particularly in ryotwari and mahalwari areas. This made it a source of security

to borrow from money-lenders. The government helped the money-lenders not only by facilitating the land transfers but also by backing them with legal network which helped in the recovery of loan from the defaulters. The legislations which helped the money-lenders were: Civil Procedure Code of 1859; The Limitation Act of 1859; The Law of 1855 and the Introduction of Compulsory Registration of Deeds dealing with immovable property [Chaudhuri, 1982, Pp. 151-152].

Borrowing from moneylenders resulted in indebtedness, land transfers, rising tenancy and so on. For instance, in Punjab, it was found that, in 1930, 87 per cent of the proprietors were under debt, the average debt per proprietor was Rs. 463 and total debt was 12 times the land revenue paid by all, whether indebted or not. About 40 per cent proprietors in debt were small proprietors owning land less than 8 acres whose average debt was Rs. 310. Only 20 per cent of the tenants were free from debt and average debt of the indebted was Rs. 290. Among the tenants-at-will and farm servants, 22 per cent were free of debt and the average debt of the indebted was Rs. 135; their debt was low because their credit worthiness was low [Darling, 1947, Pp. 15-16].

TABLE 2. EXTENT OF INDEBTEDNESS IN VARIOUS PROVINCES IN 1930

(per cent)

Provinces	Households Under Debt	Mortgage Debt to Total Debt
Assam	85	
Bengal		45.00
Berar		61.50
Bihar and Orissa	50 to 65	40.00
Bombay Presidency		28.00 to 36.00
Central Provinces**	54	
Central Provinces (including Berar)		27.50
Gujarat	78	
Madras		50.00
Punjab*	87	
Punjab (Usufructuary Mortgage)		43.00
Sind	87	27.50
United Provinces	54	56.00

* Based on interview of 112,358 cooperators
** of all rent paying cultivators.
Source: M. Darling, *The Punjab Peasant in Prosperity and Debt*, 1947, Pp. 5 and 8.

The extent of indebtedness and mortgage debt as per cent of total debt in various provinces in 1930 are shown in Table 2. The incidence of indebtedness was very high in practically all the provinces. The higher proportion of mortgage debt to the total debt in the zamindari areas could possibly be because of limited rights granted to the peasants to sell their land. The quantum of rural debt in British India as estimated between 1911 and 1938 is given in Table 3.

TABLE 3. AMOUNT OF TOTAL RURAL DEBT IN INDIA

(Rs million)

Year	Amount	Estimated by
1911	3,000	Sir Edward Mclagan
1924	6,000	Sir M.L. Darling
1930	9,000	Indian Central Banking Enquiry Committee
1935	12,000	Dr. RadhaKamal Mukherjee
1938	18,000	Mr. E. V. S. Manian

Source: S. J. Patel, *Agricultural Labourers in Modern India and Pakistan*, 1952, p. 56.

The incidence of indebtedness in the zamindari areas, however, cannot be fully explained in terms of the factors which caused it in the ryotwari areas. Here, the most important factors, besides excessive revenue demand by the layers of intermediaries, were the falling land:man ratio, preponderance of mono-culture particularly in Bihar, diminishing productivity of agriculture, cultivation of cash crops, abrupt fluctuations in the agricultural prices and the great depression of 1930s [Chaudhuri, 1969, p. 204 and 1975(b), Pp. 109-125].

The mounting indebtedness triggered off large scale land transfers from the hands of agriculturalists to non-agriculturalists. This was more pronounced in ryotwari areas where the peasant was endowed with the right to alienate/transfer his land by sale and mortgage or sublet it. For instance, the area owned by money-lenders in Poona, a typical ryotwari district, increased from 4,001 acres in 1854 to 10,075 acres in 1874 (Table 4).

TABLE 4. GROWTH OF MONEYLENDERS' PROPERTY IN POONA

Year	Number of Khatas	Area (Acres)	Assessment (Rs)
1854	164	4,001	1,924
1864	203	5,292	3,721
1874	272	10,075	7,134

Source: *Report of Deccan Riots Commission, 1875*; Vol. 1., p. 33. Cited in Sunil Sen, *Agrarian Relations in India, 1793-1947*, p. 119.

Taking note, Government of Bombay imposed legal restrictions on the activities of money-lenders by enacting the Deccan Agriculturalists' Relief Act of 1879. The Act empowered the courts to go into the whole history of indebtedness, reduce the rates of interest and arrange the repayment of loans in instalments. However, land transfers continued; it was estimated that 10 per cent of the cultivated land in Bombay Presidency changed hands between 1883 and 1891, the extent of mortgage being much higher [Fukazawa, 1982, Pp. 196-197]. The Indian Famine Commission, 1901, estimated that at least one fourth of the cultivators of Bombay Presidency had lost possession of their land. The Reports of Bombay Land Revenue Administration for 1926-27 and 1936-37 indicated that, within ten years, 20 per cent of the total cultivators' land passed into the hands of money-lenders and that the number of actual cultivating owners declined from 1,930,000 to 1,761,000.

In Madras, the number of cultivating owners declined from 512 per thousand in 1901 to 390 per thousand in 1931 and the number of agricultural labourers increased from 289 per thousand to 429 per thousand. According to an inquiry in 1934 the total agricultural land that changed hands in Madras province (except for the west coast district of Malabar and South Kanara) was roughly 10,351 thousand acres of which 20 per cent went to non-agriculturalists [Sayana, 1949, Pp. 136, 188].

To check large scale land transfers from agriculturalists to non-agriculturalists, the Punjab Government enacted the Punjab Land Alienation Act of 1901. The act imposed restrictions on the transfer of land to non-agriculturalists. However, due to many loopholes in the Act, the land transfers continued [Malaviya, 1954, p. 161]. Table 5 gives an idea of the extent of land transfers in Punjab between 1896 and 1924.

As mentioned earlier, land transfers took place in the zamindari areas despite the fact that the right to transfer the land was not granted to the peasants. Towards the closing decades of the 19th century, the custom of alienating land had got firmly established, the legal recognition to which was accorded conditionally in the Tenancy Act of 1928 and fully in the Tenancy Act of 1938 [Chaudhuri, 1975(b), p. 133].

The number of land sales and mortgages in Bengal between 1930 to 1942 is shown in Table 6. Until 1936-37, the sales of land increased slowly but thereafter, they increased rapidly. On the other hand, the number of mortgages declined after 1937 or so.

TABLE 5. LAND TRANSFERS IN PUNJAB, 1896-97 TO 1923-24

Year	Area Sold (000 Acres)	Price Per Acre (Rs)
1896-97	149	78
1897-98	168	81
1898-99	155	83
1899-1900	160	81
1900-01	181	83
1901-02	143	71
1902-03	139	71
1903-04	132	85
1904-05	123	86
1905-06	142	85
1906-07	114	103
1907-08	121	101
1908-09	123	114
1909-10	126	121
1910-11	123	129
1911-12	152	123
1912-13	185	107
1913-14	122	249
1914-15	134	180
1915-16	107	216
1916-17	107	227
1917-18	101	252
1918-19	142	184
1919-20	143	295
1920-21	138	345
1921-22	135	385
1922-23	126	314
1923-24	119	383

Source: H. Calvert, *Wealth and Welfare of Punjab*, Appendix, XXV. Cited in Master Hari Singh, *Agrarian Scene in British Punjab*, Vol. 1, 1983, p. 23.

TABLE 6. NUMBER OF LAND SALES AND MORTGAGES IN BENGAL, 1930-40

Year	Number of Sales	Number of Mortgages
1930	129,184	510,974
1931	105,701	376,422
1932	114,619	338,945
1933	120,492	313,431
1934	147,619	349,400
1935	160,341	357,297
1936	172,956	352,469
1937	164,819	302,529
1938	242,583	164,895
1939	500,224	154,780
1940	502,357	160,152
1941	634,113	151,533
1942	749,495	106,088

Source: Binay Bushan Chaudhuri, 'The Process of Depeasantisation in Bengal and Bihar, 1885-1947', *Indian Historical Review*, Vol. 2., No. 1, 1975, P. 138.

These land transfers were not merely changes in the titles of land; they affected seriously the agrarian relations in the country. In ryotwari areas, the peasantry disintegrated into landlords and rich peasants on the one hand, and tenants-at-will and agricultural labourers on the other. In the zamindari areas, polarisation of the peasantry occurred into landlords and jotedars on the one hand, and under-raiyats, share croppers, and agricultural labourers on the other.

DISTRIBUTION OF OWNERSHIP HOLDINGS, EXTENT OF TENANCY AND THE EMERGENCE OF AGRICULTURAL LABOURERS AS A CLASS.

Distribution of Ownership Holdings

The massive indebtedness and land transfers culminated in the concentration of landholdings in a few hands begetting the exploitative tenancy arrangements and the emergence of agricultural labourers as a distinct class. The extent of inequalities in the distribution of landholdings in the ryotwari and mahalwari settlements has been brought out by the reports of the various commissions and individual studies. In Bombay, according to the data collected by the Royal Commission on Agriculture, in 1924-25, 86 per cent of the cultivated area was held by 12 per cent of the cultivators whereas the remaining 88 per cent of the cultivators possessed only 14 per cent of the cultivated land [Fukazawa, 1982, p. 200]. Likewise, in Gujarat in 1942-43, 67 per cent of the cultivators owned land below 5 acres and possessed only 23 per cent of the total area while 4 per cent owned more than 25 acres and accounted for 28 per cent of total area (Table 7).

TABLE 7. DISTRIBUTION OF RYOTWARI LAND IN BRITISH GUJARAT

Size of Holdings (Acres)	Percentage of total persons/area			
	1916-17		1942-43	
	Persons	Area	Persons	Area
Below 5	64.00	20.00	67.00	23.00
5-15	25.00	31.00	23.00	33.00
15-25	6.00	17.00	5.0	17.00
Above 25	5.00	33.00	4.00	28.00

Source: F. Fukazawa, 'Agrarian Relations in Western India', in Dharma Kumar (Ed.), *Cambridge Economic History of India*, Vol. 2, 1984, p. 201.

In the ryotwari areas of Madras Presidency, while landowners owning more than 18 to 20 acres of land constituted just 0.9 per cent of the total number of the land holders (72.04 lakh), they owned 12.8 per cent of the total 282 lakh acres of ryotwari land [Malaviya, 1954, p. 197]. The detailed distribution of ryotwari land in Madras, on the eve of Independence, is given in Table 8. It can be seen that 77.9 per cent of the total number of registered landowners owning land below 3 acres possessed 40.7 per cent of the total land, whereas 0.8 per cent of the top land holders owned 13.10 per cent of the total land.

Table 9 gives the distribution of landholdings in Punjab in 1924 and in 1939. The distribution was highly unequal in both the years. In 1939, 63.7 per cent of the owners owning land below 5 acres accounted for only 12.2 per cent of the total area whereas 2.4 per cent of the owners owned 38 per cent of the land.

TABLE 8. DISTRIBUTION OF LANDHOLDINGS IN MADRAS PRESIDENCY ON THE EVE OF INDEPENDENCE

Size of Holdings (Acres)	Number in Each Group as a Percentage of Total	Extent of Land Owned by Each Group Expressed as a Percentage of Total
Below 1	22.80	3.40
1 - 3	55.10	37.30
3 - 9	15.60	27.20
9 - 12	3.80	10.20
12 - 18	1.90	8.30
18 - 50	0.60	6.20
Above 50	0.20	6.90

Source: H. D. Malavia, 1954, *Land Reforms in India*, p. 178.

TABLE 9. DISTRIBUTION OF OWNERSHIP HOLDINGS IN PUNJAB IN 1924 AND IN 1937

Size of Holdings	1924		1939	
(acres)	Holdings	Area	Holdings	Are
0.01 - 5.00	58.57	12.12	63.70	12.20
5.01 - 15.00	26.21	26.71	24.20	22.20
15.01 - 25.00	6.96	15.20	5.80	12.80
25.01 - 50.00	4.81	20.29	3.90	14.80
Above 50 Acres	3.45	25.68	2.40	38.00
All Sizes	100.00	100.00	100.00	100.00

Source: H. Calvert, *The Size Distribution of Agricultural Holdings in Punjab*, 1925, Pp. 3-4, and 1939 p. 1.

Among the zamindari areas, in Bengal, in 1940, 64 per cent of the cultivators owned less than 2 acres, 20 per cent between 2-4 acres, 25 per cent between 4-10 acres and the remaining 8.4 per cent more than 10 acres [Floud, 1940, Vol. II, Pp. 114-115]. In the United Provinces, on the eve of Independence, 85.0 per cent of landowners commanded only about one-fifth of total agricultural land while the remaining 15 per cent owned 80 per cent of the land [Stroke, 1975, p. 113].

Some more evidence on the distribution of landholdings for a few states is available for 1948-49 (Table 10). It shows that in the zamindari provinces of Orissa and United Provinces, 50 and 55 per cent respectively of the cultivators owned less than 2 acres. In ryotwari areas, on the other hand, it was 12.2 per cent in Karnataka, 27.5 per cent in Gujarat, and 51.0 per cent in Madras.

Thus on the eve of Independence the distribution of landholdings was highly unequal in all the provinces under various land settlements. In particular, the zamindari areas had a preponderance of very small cultivators, lending themselves to all sources of exploitation by a handful of big landowners.

TABLE 10. PERCENTAGE OF FAMILIES WITH DIFFERENT SIZES OF LANDHOLDINGS ON THE EVE OF INDEPENDENCE

Provinces	Less than 2 Acres	2 - 5 Acres	5 - 10 Acres	10.00 Acres and Above
1	2	3	4	5
Assam	38.90	27.40	21.10	12.60
Bombay	27.50	25.70	22.30	24.50
Deccan	19.80	16.70	18.80	44.70
Karnataka	12.20	19.20	21.70	46.90
West Bengal	34.70	28.70	20.00	16.60
Central Provinces	49.00	-	21.00	30.00
Orissa	50.00	27.00	13.00	10.00
Madras	51.00	31.00	7.00	11.00
United Provinces	55.80	25.40	12.80	6.00

Source: *The Report of Congress Agrarian Reform Committee*, 1949, p. 14.

Extent and Types of Tenancy

It was estimated that on the eve of Independence about 30 per cent of the area in Bombay and Madras ryotwari provinces was cultivated by sub-tenants [Dutt, 1976, p. 236]. In Madras, 14 per cent of the agricultural population were landless tenants and 15 per cent were small holders cultivating the lands of others. The total number of tenants was estimated to be 1.5 million [AICC, 1949, p. 7]. There were different categories of tenants in different regions of the Presidency. In Malabar and South Kanara, tenants were of two types: Kanamdara and Verumpattamdara. Kanamdara held land for 12 years in the first instance subject to payment of rent. Tenancy rights were transferable and not affected by the death of contract parties. Verumpattamdara were tenants for a single year unless otherwise specified, holding land under share-cropping. In Tanjore, the tenants were mostly share-croppers (warams) [Malaviya, 1954, Pp. 11-16]. The tenancy arrangements were in the nature of share-cropping and highly exploitative. Tenants were forbidden to grow certain crops and evictions were common. Share-cropping as a mode of tenancy was more preponderant in zamindari areas.

Tenants in Bombay Presidency cultivated the land mostly on annual lease basis paying half the produce as rent, though higher rates were not exceptional. Besides, tenants were subjected to all kinds of illegal exactions such as khot faida, paid to landlords (Khots) in South Konkan. In north Kanara, in 105 villages, it was estimated that over 30 per cent of the land was cultivated by tenants and 65 per cent of the tenants were share-croppers with average rent ranging from one-half to two-thirds of the produce. On 20 per cent of the area, average cash rent was about one-twentieth of average sale value of the land. In Gujarat, under taluqdari tenure (where taluqdars were the landlords) land leased-in was about 30 per cent [Fukazawa, 1982, Pp. 202-203].

In Punjab, tenants were generally either occupancy tenants or tenants-at-will. Occupancy tenants enjoyed permanent and heritable rights on land and paid land revenue to the state. However, they had to pay malikana to the landlord in recognition of his superior rights of proprietor. Tenants-at- will enjoyed no rights and paid half the crop as land rent. A small percentage of tenants also paid cash rent which varied with the price of agricultural produce but approximated to half the value of the crop. The cash rent was estimated to be Rs. 10-12 per acre.

The main categories of tenants in Bengal on the eve of Independence were raiyats, under-raiyats, and bargadars. Raiyats were tenants who held land directly from the zamindars on payment of rent. They enjoyed occupancy rights which were hereditary and they could not be evicted. Under-raiyats were the tenants of raiyats who enjoyed no security and could be evicted for non-payment of rent and misuse of land. Among the under-raiyats were sanja tenants who paid fixed quantity of produce as rent; utbandi tenants were tenants-at-will; rents of gulo tenants were determined as a share of produce but paid in cash equivalent and rents of kut tenants were determined each year as a portion of produce [Sen, 1962, Pp. 116-117]. It was estimated that out of the total land transferred from the cultivators between 1928 and 1940, 31.7 per cent was devoted to barga cultivation, 24.6 per cent was cultivated by under-raiyats and 5.7 per cent by employing hired labour.

In the United Provinces, there were hereditary tenants and occupancy tenants having hereditary rights. No class of tenants, except tenants in permanently settled areas, enjoyed the right to transfer their land. The tenants of sir and khudkasht land of zamindars were tenants-at-will, not enjoying any right.

Tenancy Legislation

The landlord-tenant relationship remained undefined in zamindari areas for 66 years from 1793 to 1859 when the first Rent Act of 1859 was enacted. Till then, the prime concern of the government was to safeguard the collection of revenue. However, seeing the mounting agrarian discontent and unrest among the peasantry on account of undefined rent relations, the Bengal Rent Act of 1859 was enacted. It abolished the

old distinction between khudkasht (owner cultivator) and paikasht (tenant) and made 12 years continuous possession of the land as the sole criterion to confer occupancy rights on the raiyats. It also declared that rent could be enhanced only if there had been an increase in the value of produce or that the rent of a particular holding was below the prevailing 'Pargana rate' [Floud, 1940, p. 25]. The Act thus provided some security to the occupancy raiyats but left the interests of non-occupancy raiyats to the dictates of the landlord. In practice, the Act did not prove to be of much use because, in the absence of village records and the dominant position of the landlords, it was not easy to prove 12 years' continuous possession of the land. The vagueness of the term 'prevailing rate' left even the occupancy raiyats insecure and exposed to eviction. To improve the situation, Government enacted the Bengal Tenancy Act of 1885. It stipulated that any raiyat who had been in possession of land for 12 years either himself or through inheritance would be entitled for occupancy rights and would immediately acquire such rights on any new land which he took for cultivation. The raiyat was also protected in the event of his superior landlord being replaced and was authorised to sublet and mortgage the land for a period of 9 years. The Act also prohibited eviction of occupancy raiyats on account of arrears of rent except through a decree from court. The right to transfer land was left to be governed by the custom. Two more grounds for rent enhancement, besides those that already existed, viz., increase in the productivity of land owing to landlord's actions and fluvial actions were also allowed. The Act, for the first time, sought to limit the rent of under-raiyats which was not to exceed more than 50 per cent of the rent paid by raiyats to the landlords in case of written agreement and 25 per cent otherwise.

In 1921, a Committee was set up by the Bengal Legislative Department with John Kerr as Chairman to suggest amendments in the Tenancy Act of 1885. The Tenancy Act of 1928, modelled on the suggestions of the Committee, for the first time legalised the land transfers subject to payment of 20 per cent of sale price as transfer fee to the landlords. The Act also empowered the landlords to pre-empt the sale of the land on the payment of sale price plus 10 per cent. (These conditions were finally withdrawn in the Tenancy Act of 1938). The Act limited the usufructuary mortgage to 15 years. It distinguished three categories of under-raiyats: (i) those who had already obtained the occupancy rights through custom and were given full rights of occupancy except transferability; (ii) those who had homestead on their land or had possessed the land for 12 continuous years and could not be ejected save for the non-payment of rent or misuse of land, and (iii) those who could be ejected by the landlords on the grounds of self-cultivation. However, the most important recommendation of the Kerr Committee to treat bargadars, who supplied their own seeds and cattle and produced the crops of their choice, as tenants was not accepted in the face of stiff opposition from the landlords.

Notable legislations governing the tenant-landlord relations outside Bengal were: (i) Madras Estates Acquisition Act, 1908 which protected the raiyats from eviction as long as they paid the rent under certain specified conditions and conferred on them the right to transfer the land; (ii) Orissa Land Revenue and Land Tenancy System along with Orissa Tenancy Act, 1913 which were more or less modelled on the lines of Bengal Tenancy Act, 1885; (iii) The United Provinces Tenancy Act, 1938 which consolidated Agra Province Act, 1881, amended in 1901 and 1926 and Avadh Act of 1886 amended in 1926. The U.P. Act conferred the occupancy rights on hereditary tenants which included occupancy and statutory tenants but provided no protection to the tenants of sir and khudkasht land of zamindars.

In ryotwari areas, on the other hand, where no tenant existed in government records, no attempt was made to govern the landlord-tenant relations until the enactment of the Bombay Tenancy Act, 1939, which amended Bombay Land Revenue Code, 1879. The Act recognized three categories of tenants: (i) protected tenants holding land for six years prior to the Act; (ii) ordinary tenants who were ensured tenancy for less than ten years; and (iii) tenants-at-will who were provided no security. Thus, although no landlords and intermediaries were created in the ryotwari and mahalwari areas at the time of the introduction of these settlements, subsequent developments, such as

introduction of cash crops and compulsory payment of revenue in cash, led to massive indebtedness and land transfers. Land transfers were facilitated by the right of peasant proprietor to alienate his land. Consequently, absentee landlordism, tenancy particularly share tenancy, rack-renting, ejectments, usury and so on became common and widespread. On the whole, taking the zamindari as well as ryotwari areas, about 75 per cent of the cultivated area was estimated to be cultivated by tenants with varying rights and liabilities. The rents were in most cases exorbitant. Besides, the tenants were required often to render a variety of personal services of a semi-feudal type to the landowners [Nanavati and Anjaria, 1970, p. 246].

Emergence of Agricultural Labourers as a Class

The impact of the introduction of different land settlements and subsequent changes thereof and the disintegration of domestic industries leading to the displacement of artisans and weavers led not only to the concentration of landholdings in a few hands and growth of exploitative tenancy relations but also to the emergence of agricultural labourers as a distinct class in rural areas. Tracing the growth of agricultural labourers as a class during the British regime Patel observed: 'The small cultivator was the focal point of the pre-nineteenth century economy. Groups of small cultivators and artisans supplementing each other's needs lived together in self-sufficient village communities. In the traditional economy, there was no room for a distinct class of persons working solely as agricultural labourers. In sharp contrast, one finds today that nearly two-fifth of the agricultural population is composed of landless agricultural labourers, the largest single occupational group in India. Undoubtedly, the structure of traditional Indian agrarian society has undergone a great transformation during the last one and half century' [Patel, 1952, Preface]. Some economic historians attribute the growth of agricultural labourers to the rigid caste structure of the Indian society [Dharma Kumar, 1965 and R. Mukherjee, 1957, Pp. 59-128].

Particularly since 1891, agricultural labourers as proportion of total agricultural population increased (Table 11). The percentage of agricultural labourers which had declined from 18 per cent in 1871 to 13 per cent in 1891 increased to 38 per cent in 1931. This cannot all be attributed to changing definitions and changing coverage in successive censuses. The transformation had in fact occurred in the Indian economy in the nineteenth and early twentieth centuries[6].

The extent of polarisation of Indian peasantry in 1931 can be seen from the figures presented in Table 12. Landless agricultural labourers of different types constituted 37.8 per cent of the agrarian population. Petty proprietors, tenants, tenants-at-will and share-croppers accounted for 42.3 per cent of the total agricultural population.

TABLE 11. OCCUPATIONAL COMPOSITION OF AGRARIAN POPULATION: 1871 TO 1931

(Million)

Occupation	Adult Male Workers	Male Workers	Population Supported			Working Population	
	1871-72	1881	1891	1901	1911	1921	1931
Total Agricultural Population	45.70	83.70	200.90	204.10	225.30	106.30	110.00
of Which:							
(a) Rent Receivers	-	-	-	-	7.70	3.70	4.20
(b) Owner Cultivators	37.50	71.20	175.40	152.70	167.00	74.70	28.40
(c) Tenant Cultivators	-	-	-	-	-	-	36.20
Agricultural Labourers	8.2	12.50	25.50	52.40	50.60	27.80	42.20
of Which:							
(a) Farm Labourers	-	-	-	33.50	41.20	21.70	33.50
(b) Unspecified Labourers	-	-	-	16.90	8.30	5.10	7.50
(c) Plantation Labourers	-	-	-	1.00	1.10	1.00	1.20
Agricultural Labourers as per cent of total Agricultural Population	18.00	15.00	13.00	25.10	22.00	26.20	38.00

Source: S. J. Patel, *Agricultural Labourers in Modern India and Pakistan*, 1952, p. 14.

TABLE 12. OCCUPATIONAL COMPOSITION OF AGRARIAN POPULATION IN 1931

Groups	Number in (Million)	Per Cent
Total Agricultural Working Population of Which:	111	100.00
i. Rent Receivers	4	3.60
ii. Farmers Cultivating More than Five Acres of Which:	28	25.30
(a) Owner Cultivators	18	16.30
(b) Tenants	10	9.00
iii. Dwarf Holding Labourers of Which:	37	33.30
(a) Petty Proprietors	10	9.00
(b) Tenants-at-Will and Share Croppers	27	24.30
iv. Landless Agricultural of Which:	42	37.80
(a) Bonded Labourers	3	2.70
(b) Under Employed Labourers	35	31.50
(c) Full Time Free Wage Labourers	4	3.60
Those with no right to land (Totals under ii(b), iii(b) and iv)	79	71.10

Source: As in Table 11, p. 148.

Summing Up

The pre-British India was characterised by self-sufficient village communities. The terms such as agrarian relations, landlords, tenants, etc., were alien to these communities where hold on land was in terms of possession for cultivation rather than in terms of ownership. They paid land revenue to the king varying from 1/6th to 1/3rd of the produce which was collected by the king's nominee variously known as zamindars, jagirdars, malguzars, taluqdars, etc.

In the later days of the Mughal empire, the right to zamindari could be acquired from the king's representatives on payment. The East India Company thus acquired the zamindari rights over the three villages to begin with and then over the whole of Bengal. The replacement of native zamindars with that of alien zamindars caused a major break in the existing agrarian relations. The British experimented with various modes of revenue collection to obtain maximum and assured revenue from the peasantry. These experiments ultimately ended with the introduction of zamindari, ryotwari and mahalwari land settlements. In the permanent settlement areas where zamindars, the traditional revenue farmers, were made the proprietors of land by fixing the land revenue in perpetuity, sub-infeudation grew and khudkasht raiyats were exposed to rack-renting, ejectments, insecurity of tenure, etc. In the ryotwari and mahalwari areas, where peasant proprietorship was sought to be introduced, the peasant proprietors were in no way better off. They were exposed to the settlement officers' subjective judgement in fixing the land revenue. Furthermore, certain rights bestowed upon them, such as the right to sell, mortgage and sublet the land, combined with high levels of revenue assessment and unprecedented rigour in its collection led to extensive indebtedness and land transfers. The land transfers on a large scale also took place in zamindari areas in spite of the fact that right to sell the land was not granted to the raiyats until 1928.

Consequently, land distribution became extremely unequal. In practically all the provinces, the peasantry became polarised into zamindars and landlords on the one hand, and tenants, share-croppers and agricultural labourers on the other. Semi-feudal exploitation of the tenants by means of rack-renting, insecurity of tenure, usury, etc., became common. In zamindari areas, tenancy legislation enacted to protect the raiyats and under-raiyats did not prove to be of much help. The bargadars, who constituted the overwhelming majority of the tenants, were not even accorded the status of tenants and, therefore, remained outside the scope of tenancy legislation. In the ryotwari areas, where tenants did not legally exist in the government records, there was no legislation to protect the tenants until the Bombay Tenancy Act 1939. Agricultural labourers emerged as a distinct class. The sum total of all

these complex agrarian relations was a 'built-in-depressor' for the development of agriculture which remained practically stagnant during the British regime [Thorner, 1976, p. 17].

POST INDEPENDENCE AGRARIAN REFORMS

Rural India, on the eve of Independence, was thus characterised by feudal and semi-feudal agrarian relations. The peasantry under all varieties of land settlements was exploited by means of rack-renting, insecurity of tenure, forced labour, and usury. The net result was the impoverishment of the peasantry on the one hand and the stagnation of agricultural production on the other. A complete restructuring of agrarian relations was called for.

Evolution of Agrarian Reforms Policy

The Indian National Congress involved the peasantry in the freedom struggle by linking up its emancipation from the exploitation of feudal landlords and capitalists with the attainment of Independence. Throughout the freedom movement, the peasantry was assured that Independence would mean not only the end of foreign rule but also freedom from the semi-feudal exploitation by the parasitic landlords. The peasants' demands continuously found a prominent place in the agenda of various conferences of the Indian National Congress. The most important announcement on land reforms was made in the 45th session of the Congress held at Karachi in 1931 which included substantial reduction in agricultural rent or revenue paid by the peasantry and, in case of uneconomic holdings, exemption from rent for such period as may be necessary, relief being given to small zamindars wherever necessary by reason of such reduction.

The National Planning Committee set up by the Congress in 1936 recommended that cultivation should be organized on a collective basis on the land acquired by the government and on cooperative basis elsewhere. Furthermore, it recommended abolition of all intermediaries between the state and actual cultivators. After the achievement of Independence in 1947, a Congress Economic Reforms Committee was set up to chalk out the broad contours of agrarian reforms policy. The Committee, besides endorsing the recommendation of the National Planning Committee to abolish all intermediaries, recommended that a maximum size of holding should be fixed and the surplus land over such a maximum should be acquired and placed at the disposal of village cooperatives. Small holdings should be consolidated and steps taken to prevent further fragmentation [NCA, 1976, Vol. XV, p. 21].

Congress Agrarian Reforms Committee, 1949

Later in 1949, the Congress Agrarian Reforms Committee prepared a blue print of agrarian policy which exercised considerable influence on the land reform measures conceived and implemented during subsequent years. It laid down the following broad principles which should govern the future pattern of agrarian economy of the country: (i) The agrarian economy should provide opportunity for the development of individual personality; (ii) There should be no exploitation; (iii) There should be maximum efficiency of production; and (iv) Scheme of agrarian reforms should be practicable [AICC, 1949, p. 20].

While deliberating upon the choice of farm organisation that would be appropriate in the socio-economic and cultural milieu of rural India, the Committee rejected the idea of capitalist farming in the country because, it would deprive the agriculturists of their rights in land, turn them into mere wage earners, and subject society to capitalist control in such a vital matter as supply of food. It recommended individual peasant farming assisted by the cooperative organisation of credit and marketing as a general pattern of cultivation to realise the objectives of agrarian economy. Regarding the suitable unit of production to carry on individual peasant farming, the Committee introduced the concept of 'economic holding' which should be determined regionally in such a way that (i) it must afford a reasonable standard of living; (ii) it must provide full employment to a family of normal size and

at least a pair of bullocks; and (iii) it must have a bearing on other relevant factors peculiar to the agrarian economy of the region.

The Committee also recommended individual peasant farming on 'basic holding' which it defined as holding below economic holding but not palpably uneconomic. The cultivation on the remaining holdings was recommended on cooperative basis. The Committee further suggested that, keeping in view the limited supply of land in relation to people and managerial capacity and financial resources of an average cultivator, there should be a ceiling on the size of holding which an individual farmer should own and cultivate. It, therefore, recommended three times the size of economic holding as an 'optimum holding'. The Committee made far reaching recommendations on the question of rights in land. It laid down that (i) the cultivator should have a permanent, heritable right to cultivation in land; (ii) the tenant cultivating the land continuously for six years should get the occupancy rights; (iii) subletting of land should be prohibited except in the case of widows, minors and other disabled persons; (iv) determination of fair rents and commutation of crop share into cash rent; (v) tenancy should terminate if the tenant does any act destructive or permanently injurious to land; (vi) tenancy should not terminate on account of rent arrears except through court; (vii) protected tenancy may also be terminated if the owner of the land desires to resume land for self-cultivation within a period of three years after the passing of an act; (viii) if the owner had less than an economic holding he should have the right to resume land from the protected tenants which should give him an economic holding and (ix) the owner should have the right to resume land upto the maximum of three times the economic holdings provided the tenant had land in excess of the limit of an economic holding.

First Five Year Plan, 1951-56

Land reforms policy formulated in the First Five Year Plan, laid down that a national land policy should be evolved in such a way that it reduced disparities in wealth and income, eliminated exploitation, provided security for tenants and workers, and promised equality of status and opportunity. Therefore, the outline of land policy had to be conceived in terms of different interests in land which were intermediaries, large owners, small and middle owners; tenants-at-will, and landless workers. The Plan rightly considered the abolition of intermediary rights which brought 20 million cultivators into direct contact with the state as a major achievement. Regarding the ceiling on landholdings, the whole approach was influenced by the belief that large holdings were more productive and that backwardness of Indian agriculture could primarily be attributed to the extreme preponderance of small and uneconomic holdings. Therefore, on this question, it had a divided mind. It said: If it were the sole object of policy to reduce the holdings of larger owners with a view to providing for the landless or for increasing the farms of those who now have uneconomic fragments, the facts at present available suggest that these aims are not likely to be achieved in any substantial manner. The question, whether some limit should not be placed on the amount of land that an individual may hold has, therefore, to be answered in terms of general principles rather than in relation to the possible use that could be made of the land in excess of any limit that may be set. Nevertheless, it suggested that, in public interest, there should be an upper limit to the amount of land that an individual could hold and laid down that about three times the family holding would appear to be a fair limit for an individual holding [Planning Commission, 1953, Pp. 187-190].

Tenants were distinguished into two categories viz., tenants of big land owners and tenants of small and medium land owners; big land-owners would be allowed to resume land for personal cultivation upto three times the family holding; 'personal cultivation' was defined as cultivation by the land owner himself or his family members with the assistance of agricultural labourers. In the case of land exceeding three family holdings, tenants would be made the owners of land on payment of the price of land and revenue to the government which would pay compensation to the owners of the land.

The Plan also recommended that small and medium land owners be allowed to resume land

for self-cultivation not exceeding three family holdings. The small landholders were defined as those having land below a family holding and medium as those having land between one to three family holdings. A period of five years was provided for such resumption. The period of tenancy would be of five to ten years. On rent, the plan document stated that while it was difficult to suggest a generally applicable maximum rate of rent over greater part of the country, a rate of rent exceeding one fourth or one fifth of the produce could well be regarded as requiring special justification. It also recommended that, in all states, programme for the consolidation of holdings should be expanded and pursued with vigour [Planning Commission, 1953, Pp. 191-193].

Report of the Panel on Land Reforms

Recognising that the question of land reforms needed further and independent consideration, the Planning Commission set up, in 1955, a Panel on Land Reforms. The Panel, in turn, set up two sub-committees to go into the questions of ceiling on land holdings and tenancy reforms respectively.

On ceiling on holdings, the Panel recommended an absolute limit to the amount of land which any individual may hold to (i) meet the widespread desire to possess land; (ii) reduce the glaring inequalities in the ownership and use of land; (iii) reduce the inequalities in agricultural incomes and (iv) enlarge the sphere of self-employment. The Panel defined 'family holding' as one which yielded a gross income of Rs 1,600 or net income of Rs 1,200 per annum and recommended three times the family holding as the ceiling for an average family of five members. For families with more than five members, one additional family holding was allowed for each individual member subject to the maximum of six family holdings. To reduce the chances of malafide transfers to avoid ceiling, the Panel recommended that any transfer of land made after a given date should be disregarded while calculating the surplus land.

The Panel suggested the following categories of land to be exempted from the land ceiling legislation: (i) sugarcane farms owned by sugarcane factories; (ii) orchards; (iii) plantations (tea, coffee and rubber); (iv) special farms such as cattle breeding and dairy farms; (v) farms in compact blocks; (vi) efficient farms and (vii) mechanized farms with heavy investment. The Panel also laid down the criteria which should determine the amount of compensation to be paid to the landlords and its mode of payment.

On tenancy reforms, the Panel recommended that pending the enactment of comprehensive tenancy legislation, the following steps should be taken immediately: (i) ejectment of tenants or sub-tenants should be stayed and ejectment on account of non-payment of rent or misuse of land should be effected only through courts; (ii) tenants who had been dispossessed of their land in recent years should be restored except where ejectments were made through court for non-payment of rent and misuse of land. Voluntary surrenders should be considered ejectments and should be restored; (iii) all the tenants should come into direct relationship with the state which should recover fair rents from tenants and pay it to the landlords after deducting the cost of collection [Planning Commission, 1956(a), p. 58].

The Panel further recommended that all tenants possessing land for twelve continuous years should be conferred with permanent and heritable rights and should not be liable to ejectment on any ground whatsoever. It also provided that landlords' right for the resumption of land for self-cultivation should be subjected to the right of every tenant to retain a family holding and that the land held by tenant in excess of family holding may be resumed by the landlord. The Panel, however, recommended that small owners and persons suffering from disability may be exempted from this rule. The period for resumption of land in the case of big land owners was reduced to three years. The small owners could resume the land for self-cultivation within three years failing which lease would be deemed to be renewed for a period of five years. It further laid down that tenants of non-resumable land should have permanent and heritable rights in land.

Realising that defective and loose definition of personal cultivation rendered all tenancies insecure, the Panel defined personal cultivation more stringently. The new definition included: (i)

bearing of entire risk of production by the cultivator; (ii) personal supervision with the residence in the village or in the contiguous village during the major part of the agricultural season and (iii) performance of minimum labour. The Panel, however, did not insist on the inclusion of performance of personal labour in the definition of personal cultivation and on grounds that, as the three conditions described above represented the goal which should gradually be achieved, it was not necessary immediately to insist upon the performance of minimum labour, provided the owner met the entire risk of cultivation, lived in the village and personally supervised agricultural operations [Planning Commission, 1956(a), p. 63]. The Panel did not favour complete prohibition of leasing which, it thought, was not a practical and desirable proposition.

Second (1956-61) and Third Five Year (1961-66) Plans

The Second Five Year Plan emphasized the need for increasing production and level of diversification, and laid down the following two-fold objectives of land reforms policy: (i) to remove the impediments upon agricultural production as arise from the character of the agrarian structure; and (ii) to create conditions for evolving as speedily as possible an agrarian economy with high levels of efficiency and productivity. Dealing with the problem of tenancy, the Plan admitted the fact of large scale ejectment of tenants in the guise of voluntary surrenders and endorsed the recommendations of the Panel on Land Reforms regarding the stay of ejectment of tenants and the restoration of tenancies surrendered during the preceding three years. It laid down that voluntary surrenders would not be effective unless registered by the revenue authorities and restricted the landlords' right of possession of land surrendered only to the extent of the right of resumption. It also endorsed the Panel's definition of personal cultivation and stipulated that when the land was to be resumed for personal cultivation, the desirability of providing also for third element in personal cultivation namely, personal labour might be considered. In particular, guidelines were recommended for resumption of land for self-cultivation: (i) small owners having land less than one third of a family holding should be permitted to resume their entire area; (ii) owners owning land between basic holding and family holding might resume one half of the area held by tenants but in no case less than a basic holding; (iii) where the landowner had under the personal cultivation land exceeding a family holding but less than the ceiling he might resume land if the tenant is left with a family holding and the total area obtained by the owner together with the area already under his personal cultivation did not exceed ceiling level; (iv) if the landowner has less than a family holding under his personal cultivation he might be allowed to resume one half of the tenants' holdings or an area which together with area under his personal cultivation makes up a family holding whichever was less provided that the tenant was left with not less than a basic holding [Planning Commission, 1956(b), Pp. 186-189]. Further, a period of five years was recommended for the resumption of land with the added condition that landowners, after resuming the land, should get it demarcated within a period of six months. Tenants of non-resumable land would be conferred with ownership right by recovering the instalment of compensation along with land revenue. Regarding the level of rent, the Second Plan endorsed the recommendation of the First Plan to bring it to one-fourth to one-fifth of the gross produce.

The Second Five Year Plan was more specific regarding the ceiling on landholdings and considered its various aspects, such as, (i) to which land should ceiling apply; (ii) levels at which ceilings may generally be fixed; (iii) what exemptions should be made; (iv) steps necessary to prevent malafide transfers; (v) rate of compensation for the ceiling-surplus land to be acquired; and (vi) distribution of acquired land. The questions whether ceiling should be applied to an individual or to a family, allowances to be made for the variations in the size of the family, and the area to be included in the family holding were left to be decided by the states. The Plan also called for a suitable action to prevent the malafide transfers and circumvention of the ceiling laws. It endorsed the different categories of land, as recommended by the Panel on Land Reforms, to

be exempted from the ceiling laws. In regard to the distribution of surplus land, it recommended that priority should be accorded to displaced tenants, farmers with uneconomic holdings, and landless workers. The Plan also emphasised the need to expedite the process of consolidation of holdings.

Though these provisions were more elaborate and comprehensive compared to those in the First Plan, they also suffered from many defects. For example, the absence of clear-cut directions to the states regarding the level of ceiling, unit of application, etc., resulted in throwing up wide variations in the respective state legislations. On the whole, an insignificant amount of land could be declared surplus consequent upon the enactment and implementation of ceiling laws. On the tenancy front, the meticulous exercises that were made to reconcile the conflicting interests of landowners and tenants nevertheless, ignored the hard realities of power structure then prevailing in the country side, character and capability of administrative machinery and a near absence of authentic revenue records. With the connivance of a corrupt and pliable revenue administration, most of the big owners were able to evade the laws and pass as small cultivators leading to eviction of tenants [Appu, 1975, Pp. 1339-1375].

The Third Five Year Plan reiterated these several provisions of land reforms and reviewed the various land legislations enacted in different states.

Fourth Five Year Plan, 1969-74

The Fourth Five Year Plan while reviewing the existing land reforms acknowledged that there were many gaps between objectives and legislations and between laws and their implementation. While commending the abolition of intermediary tenures in most of the states, it recommended that the remaining non-ryotwari tenure, as still existed in a few states, might be abolished by 1970. It further recommended *suo moto* action by the state where intermediaries retained the land which should have been vested with the state. It acknowledged the fact of widespread leasing and unsatisfactory progress in conferring ownership rights on the tenants. To instill a sense of security among tenants and sub-tenants it recommended (i) all tenancies to be declared non-resumable and permanent; (ii) quick disposal of cases where resumption has been permitted and applications made thereof except where there was likelihood of a large number of tenants being evicted, resumption to be further restricted; (iii) voluntary surrenders to be regulated prohibiting landowners taking possession of land which should vest with government; (iv) complete security of tenure in respect of homestead land on which cultivators, artisans, and agricultural labourers have constructed their houses; (v) legislations relating to security of tenure to be implemented in such a way that provisions of law were not circumvented by the landlords; (vi) legal provisions to be made to penalise the wrong-ful eviction of tenants; leasing-out in future, to be permitted only in special cases such as by persons suffering from disability for a period of three years at a time [Planning Commission, 1970, Pp. 174-177]. The Plan also highlighted major deficiencies in existing ceiling laws and recommended a review of the level of ceilings, unit of application, and exemption from the ceiling laws, in the light of recent technological developments. Emphasising the need to expedite the consolidation of land holdings, it was recommended that area which were brought under irrigation projects might be taken up on a priority basis for consolidation of holdings.

A new era in the enactment of ceiling laws was ushered in with the setting up of a Central Land Reforms Committee in August 1971 and a High Powered Committee in June 1972. The recommendations made by these Committees were reviewed in the Chief Ministers' Conference on Ceilings on Agricultural Holdings in July, 1972. Major recommendations were: (i) The level of ceiling for land under assured irrigation capable of producing two crops a year would range between 10 to 18 acres of land depending upon soil and fertility. The allowances would be made for land irrigated from private sources and capable of producing two crops a year by equating 1.25 acres of such land with one acre of land growing two crops with assured irrigation. In the case of land with assured irrigation for one season

only, the limit would be 27 acres and for all other lands, the level of ceiling recommended was to be 54 acres. (ii) Family was to be the unit of application and a family with membership exceeding five was allowed additional land subject to twice the ceiling limit; every major son would be treated as a separate unit for the purpose of applying ceiling laws. (iii) The amended laws were to be applied retrospectively with effect from a date not later than January 24, 1971. (iv) While reviewing the different categories of land exempted from ceiling, the conference recommended the withdrawal of exemption in case of land held by sugar factories and land given as a gallantry award. It further laid down that land under orchards be treated as a dry area and should not exceed 54 acres. The orchards were defined as not to include coconut and arecanut gardens, gauva, banana and vineyard orchards. (v) Priority to landless agricultural labourers while distributing the surplus land. (vi) Bringing all the amended laws under the Ninth Schedule of the Constitution and (vii) Amending the existing laws latest by 31st December 1972 [NCA, 1976, Vol. XV, Pp. 40-44].

National Commission on Agriculture, 1976

The National Commission on Agriculture, (1976), made far reaching recommendations to restructure the agrarian economy of the country. The most notable recommendations pertaining to tenancy reforms were: (i) complete prohibition of leasing-in and leasing-out of land to finally break the landlord-tenant nexus; (ii) marginal farmers should be permitted to lease-out their land for a of period not less than 3 years at a time on the basis of written lease; (iii) conferment of ownership rights on the tenants of landlords possessing land over marginal holding except the tenants of minors, widows and defence personnel; (iv) continuing right of resumption should be annulled forthwith, except in the case of marginal farmers; (v) share croppers should be recorded as tenants and given full protection; (vi) concealed tenancies should be detected and tenants in such cases be recorded as occupancy tenants; (vii) voluntary surrenders should not be accepted unless certified by revenue authorities and land thus surrendered should lie in the government pool; (viii) the definition of personal cultivation should be changed to prevent absentee landowners exercising the right of resumption and (ix) rent exceeding the recommended level should be controlled and the system of issuing rent receipts strictly enforced.

The Commission also recommended strict enforcement of the ceiling laws and inquiry into all benami and illegal transfers of land made to circumvent the ceiling laws. It further recommended to bring the land held by religious, charitable and educational trusts under the ambit of the ceiling laws [NCA, 1976, Vol. XV, Pp. 168-173].

Sixth Five Year Plan (1980-85) and Seventh Five Year Plan (1986-90)

The Sixth Five Year Plan reviewed the progress of implementation of various elements of the land policy, viz., (i) abolition of intermediaries; (ii) tenancy reforms comprising regulation of rent, security of tenure, and conferment of ownership rights on tenants; (iii) ceiling on land holdings; (iv) consolidation of land holdings; and (v) compilation and updating of land records. The Plan noted that (i) abolition of intermediary rights was almost over; (ii) legislative measures were taken to reduce the rent to the recommended level; and (iii) land ceiling legislation was enacted in almost all the states. But the implementation was tardy. Hence, the Plan laid down a time bound programme with respect to the following aspects: (i) The states not having legislative provisions to confer the ownership rights on all tenants except tenants of specified exempted categories would introduce appropriate legislative measures within one year, i.e., by 1981-82. (ii) The programme of taking possession and distribution of surplus land would be completed within two years. (iii) A systematic programme to compile and update the land records should be taken and completed within five years. (iv) Programme of consolidation of holdings should be taken in all the states with priority being given to command area of irrigation projects and completed within 10 years [Planning Commission, 1981, p. 115].

The Seventh Five Year Plan reiterated the

various provisions of land reforms policy and suggested that the states which had not complied with various policy recommendations made in the Sixth Plan should do so in the Seventh Plan. It also decided that land reforms would be treated as an essential component of anti-poverty programmes [Planning Commission, 1985, Vol. II, Pp. 62-64].

Conferences of Revenue Ministers on Land Reforms, May 1985, and November 1986

Two conferences of Revenue Ministers of State Governments were held in May 1985 and November 1986. They recommended *inter alia*, (i) complete prohibition of tenancy; (ii) change in the definition of personal cultivation which would include contribution of personal labour in addition to bearing of risk of production, residence within 5 kms of agricultural land, agriculture as a major source of income, etc.; (iii) launching of drives to unearth clandestine, informal, and insecure tenancies; (iv) conferring ownership rights on all categories of tenants; (v) reduction of rent to the recommended level; (vi) inclusion of major son in the definition of family; (vii) reduction in the level of ceiling to 5 hectares in case of land capable of producing two crops with assured irrigation, 7.5 hectares for land with assured irrigation for one crop, and 12 hectares for all other lands and; (viii) bringing land holdings of religious and charitable institutions under the ambit of the ceiling laws.

LAND REFORM LEGISLATION AND ITS IMPLEMENTATION

The foregoing account of evolution of agrarian reforms policy during the last 40 years makes clear that, in spite of certain ambiguities and vagueness in the policy announcements, it has undergone radical changes. The policy, first charted out by the Congress Agrarian Reforms Committee, and evolving itself through successive five year plans, reports of various committees, panels, and commissions have acquired many radical contents and new directions which, if implemented fully, can bring about fundamental changes in the agrarian structure of the countryside. In the following, we shall briefly examine various legislative enactments and their implementation intended to give practical shape to the many aspects of land reforms policy. Land reforms legislations are broadly of four types viz., (i) abolition of intermediaries, (ii) tenancy reform, (iii) ceiling on landholdings, and (iv) consolidation of holdings. In the present section, we see the extent to which these legislative measures have succeeded in achieving the objectives as laid down in the agrarian reforms policy. We shall consider them in that order.

Abolition of Intermediaries

Legislative measures for the abolition of intermediaries were initiated soon after Independence and the whole process was completed within the decade 1950-60. The measure brought about 20 million cultivators in direct contact with the state and paved the way for the commercial development of Indian agriculture. The measure was, however, assailed on two grounds. Firstly, it gave too liberal compensation to the intermediaries which they frittered away in consumption or on buying urban property. Only a small amount was ploughed back in agricultural production. The second and more serious objection related to the provision which permitted the erstwhile zamindars and other intermediaries to keep their sir and khudkasht land for self-cultivation. In no state except West Bengal and Jammu & Kashmir ceiling was imposed on the land which could be kept for self-cultivation. The wide publicity and debate on these measures before enactment, long gestation period between the enactment and implementation of legislations, e.g., four and a half years in the case of the Uttar Pradesh Zamindari Abolition and Land Reforms Act 1950, implementation of legislations in phases, e.g., implementation of the Bihar Land Reforms Act 1950 and the Orissa Estates Abolition Act 1951, enabled the intermediaries to enlarge their sir and khudkasht land by resorting to large scale eviction of tenants through coercion, intimidation, even violence, and the so-called voluntary surrenders were secured even from protected tenants. In his study of Social and Economic Effects of Jagirdari Abolition in Hyderabad, Khushro concluded that 'diminution of tenant cultivated and batai cultivated area need not be

looked upon as completely honest and welcome change as it was achieved partly through desirable and partly through illegal and altogether objectionable method of subtle and naked evictions' [Khushro, 1958, p. 73]. In spite of these blemishes, the singular fact remains that, in 1986, except for some stray cases in the states of Andhra Pradesh, Bihar, Gujarat, Kerala, Maharashtra, Orissa, Rajasthan, and Uttar Pradesh, the intermediary rights stood completely extinguished.

Tenancy Legislation

In 1950s, tenancy legislation was enacted in all the states with broadly similar objectives, namely, (i) security of tenure, (ii) fair rent, (iii) right to resume land for self-cultivation upto a limited area, and (iv) on non-resumable area, tenants to be converted into peasant proprietors. Of course, there remain a number of deficiencies. Firstly, although the legislation regulating the rent had been enacted in all the states, yet the rents fixed were often higher than those recommended in various plan documents. For example, in Punjab and Haryana, the rent was fixed at one third of the gross produce; in Andhra area of Andhra Pradesh the rent is 30 per cent of the gross produce on irrigated land and 25 per cent on dry land. Even in 1990, fair rent, prescribed in the First Five Year Plan, does not obtain in the states of Punjab, Haryana, Tamil Nadu, Jammu & Kashmir and Andhra area of Andhra Pradesh [Ministry of Agriculture, 1990, Ch. II, p. 3]. Moreover, where tenancy is oral and informal, provision of fair rent is of little use; a majority of tenants are share-croppers; and demand for fair rent causes immediate eviction.

Secondly, the definition of the term tenant often excludes share-croppers who constitute a fairly large proportion of tenants. For example, share-croppers have not been treated as tenants in West Bengal, Assam, Bihar, Punjab, and Haryana. Similarly, in Uttar Pradesh, persons employed as partners (sanjhis) are not treated as tenants. Still worse, the states which have formally prohibited tenancy such as Gujarat, Uttar Pradesh, Madhya Pradesh, Kerala, and Karnataka, refuse to take note of the very existence of share-croppers.

Thirdly, ejectment of tenants from their holdings is still permissible on as many as 26 pretexts in various states [NCA, 1976, Vol. XV, p. 67]. The weak and poor tenants suffer the most when ejectment is resorted to even on flimsy pretexts such as (a) failure to give notice of harvesting (Tamil Nadu); (b) failure to execute agreement (Punjab and Haryana); (c) removal of produce before the division of crop (Tamil Nadu); (d) failure to cultivate land properly (Orissa); (e) failure to cultivate in the manner and extent customary of the local area (Punjab and Haryana); (f) keeping the land fallow for two years (Assam); (g) failure to deliver the share of produce within the specified time (Assam and Andhra area of Andhra Pradesh); (h) failure to deposit arrears of rent within 15 days of the final decision in case of disputes (Andhra Pradesh, Maharashtra, Marathwada and Vidharba areas); etc.

Fourthly, the provision of voluntary surrenders provides a handy excuse to evict tenants under pressure, coercion, and sometimes even physical intimidation. The Third Five Year Plan sought to regulate voluntary surrenders by requiring them to be registered by revenue authorities and that landowners be allowed to resume land surrendered only up to the ceiling for resumption. The Fourth Five Year Plan made voluntary surrenders even more difficult by recommending that land surrendered should vest with the government. But, these recommendations have not been incorporated in the tenancy legislation of most states, such as Tamil Nadu, Punjab, Haryana, Uttar Pradesh, and others.

Fifthly, the provision regarding the resumption of land for personal cultivation has been the most pernicious in spite of the fact that many states granted only a limited right of resumption of land for personal cultivation. For example, Madhya Pradesh, Maharashtra, Kerala, Karnataka, and Orissa allowed the right of resumption for a limited period. In the states of Bihar, Haryana, Assam, and Orissa, the landowners were permitted to resume land upto the ceiling limit. In many states, the right of resumption was subjected to leaving a minimum amount of land with the tenants. But, in Andhra Pradesh (Andhra area), Assam, and Tamil Nadu, the right for resumption is a continuing one. The definition of

personal cultivation continues to be loose. The requirement of personal labour has so far not been included in the definition in any state. Residential requirement suggested in the successive Five Year Plans, and included in some state laws, is not strictly enforced.

Sixthly, the provision for the conferment of ownership rights on the tenants of non-resumable area has been far from real. For example, in Andhra Pradesh (Andhra Area), Bihar, Haryana, Punjab, Tamil Nadu, and West Bengal, there is no legislative provision for conferring ownership rights on the tenants. Even in the states where the provision has been made, the laws are either not enforced or leave out substantial body of tenants from its purview.

Lastly, the amount of compensation to be paid by the tenants to acquire the ownership rights was generally high and beyond the capacity of small and marginal tenants. Another pre-requisite for acquiring ownership right by the tenants relates to the continuous possession of land by the tenants for, say, 12 years in Bihar, 3 years in Assam, and so on. This provision negates the very idea of 'land to the tiller'. The landlords, to obviate the chance of tenant gaining ownership right, resort to the tactic of rotating tenants from plot to plot on year-to-year basis, not issuing the rent receipts, etc.

The foregoing review of the enactment and implementation of tenancy legislations in different states amply testifies to the existence of numerous deficiencies and loopholes in these laws. Way back in 1973, the Task Force on Agrarian Relations remarked that 'several states in the matter of tenancy reform legislations fall far short of the accepted policy and what is worse, implementation of enacted laws has been half hearted, halting and unsatisfactory in large parts of the country' [Planning Commission, 1973, p. 3]. It is true even today.

Ceiling on Landholdings

The imposition of ceiling on land holdings is primarily a distributive measure. The ceiling legislation was enacted in two phases: Phase I covered the ceiling laws of the late fifties and the early sixties and Phase II came since the early 1970s when more stringent ceiling laws were enacted to plug the various loopholes of the laws of Phase I. The ceiling laws of Phase I were enacted following the recommendations of the Planning Commission Panel on Land Reforms, (1955), and the guidelines laid down later in the Second Five Year Plan. The ceiling laws of Phase I were full of many defects notably: (i) High ceiling levels with a very wide range in different states. The level of ceiling ranged from 22 to 274 acres in Andhra Pradesh, 22 to 336 acres in Rajasthan, 10 to 132 acres in Gujarat, 27 to 216 acres in Mysore (Karnataka), 30 to 60 acres in Punjab and Haryana, 18 to 126 acres in Maharashtra and so on. Obviously, these laws with high ceiling levels even if implemented efficiently and honestly would not have yielded any significant amount of surplus land. (ii) To make the matter worse, high ceiling levels were fixed on individual basis in the states of Andhra Pradesh, Assam, Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Orissa, Punjab, Uttar Pradesh, and West Bengal. Only in Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Tamil Nadu and Rajasthan the ceilings were applicable to the family as an unit. (iii) Various categories of land were kept outside the purview of ceiling legislation. According to the list prepared by the National Commission on Agriculture, as many as 41 categories of lands were exempted from ceiling laws in various states. (iv) Ceiling laws of Phase I were not given retrospective effect except in Gujarat and West Bengal. Assam, Kerala, Punjab, and Tamil Nadu, declared only those transfers void which were made after the introduction and publication of the Bill. Bihar and Madhya Pradesh even went further by recognising the transfers made after the enforcement of the Bill.

These deficiencies in the ceiling laws of Phase-I reduced the redistributive objective of land ceilings to a symbolic gesture rather than a substantial measure. Consequently, for India as a whole, by the end of 1970s, the declared surplus was a mere 2.4 million acres, and the area distributed was just half of this area or one per cent of the total cultivated land of India. The states such as Bihar, Mysore, Kerala, and Orissa did not contribute even a single acre of surplus land between the

early 1960s and the end of 1960s. The contribution of Andhra Pradesh and Tamil Nadu was also negligible. Thus ceiling laws of Phase I remained both theoretically and practically a nebulous item in the scheme of agrarian reform.

In Phase II, ceiling limits were lowered, family was adopted as a unit of application, and were given retrospective effect not later than January 1972. Nevertheless, implementation was not much better and yielded an insignificant amount of surplus land (Table 13). As on June 16, 1986, not even 2 per cent of the net operated area could be cumulatively declared surplus and surplus area actually distributed as a proportion of net operated area was just about one per cent. Only in West Bengal, Andhra Pradesh, Haryana, Kerala and Punjab, the surplus area actually distributed was above one per cent. Thus, land ceiling laws have, by and large, failed to fulfil the objective of redistribution of land. In terms of total land already under the plough, they caused little change except in a few selected areas such as West Bengal and Kerala.

TABLE 13. IMPLEMENTATION OF LAND CEILING IN MAJOR STATES: AS ON JUNE 16, 1986

States	Area Declared Surplus as a Proportion of Net Operated Area	Proportion of Area Declared Surplus but not Available for Distribution	Distributable Surplus Area as a Proportion of Net Operated Area	Surplus area Actually Distributed as a Proportion of Net Operated Area
Andhra Pradesh	3.0	64.3 (60.1)	1.1	1.0
Bihar	1.2	23.2 (99.6)	0.9	0.7
Gujarat	1.0	46.0 (86.6)	0.5	0.4
Haryana	1.4	13.6 (100.0)	1.2	1.2
Karnataka	1.0	60.8 (100.0)	0.4	0.4
Kerala	2.9	49.3 (46.1)	1.5	1.4
Madhya Pradesh	0.6	42.3 (76.8)	0.3	0.3
Maharashtra	1.3	16.2 (64.2)	1.1	0.9
Orissa	1.2	15.6 (78.7)	1.0	1.0
Punjab	1.4	29.2 (100.0)	1.0	1.0
Rajasthan	1.2	34.4 (49.5)	0.8	0.8
Tamil Nadu	0.9	24.8 (65.7)	0.7	0.6
Uttar Pradesh	1.1	31.6 (26.0)	1.0	0.9
West Bengal	9.6	28.0 (52.5)	6.9	6.3
All-India	1.8	34.5 (58.5)	1.2	1.1

Note: Figures in columns 2,4 and 5 need some explanation: (1) While area declared surplus, surplus area actually distributed are progressive totals brought up to June 16, 1986, net area figures relate to 1980-81. These are, therefore, indicative only. They are to be taken approximately. (2) In column 3, the figures in parentheses show the percentage of area involved in litigation as a percentage of area declared surplus but not available for distribution.
Source: Ministry of Agriculture, Government of India.

Consolidation of Holdings

Legislative measures for consolidation of holdings have been enacted in 15 states. However, in most of these states, the legislation lacks teeth, e.g., Madhya Pradesh and West Bengal provide for voluntary consolidation. It is also practically voluntary in Gujarat, and Himachal Pradesh and it has been kept in abeyance in Rajasthan and Jammu & Kashmir. In Tamil Nadu, Kerala, Andhra Pradesh (Andhra Area), Manipur, and Tripura, there is no legislative provision for consolidation of holdings. On the whole, progress is unsatisfactory except in Punjab, Haryana, Uttar Pradesh, and Maharashtra (Table 14).

TABLE 14. CONSOLIDATION OF HOLDINGS IN MAJOR STATES: 1974 TO 1985

States	Share of Cultivable Area (Per Cent)	Percentage of Cultivable Area Consolidated up to:		
		1974	1980	1985
Andhra Pradesh	8.78	2.29	2.29	-
Assam	1.53	0.00	0.00	0.00
Bihar	6.53	2.60	-	10.59
Gujarat	6.27	10.92	14.58	18.85
Haryana	2.13	-	-	83.20
Karnataka	7.03	8.13	8.00	-
Kerala	1.31	0.00	0.00	0.00
Madhya Pradesh	12.53	16.06	16.11	-
Maharashtra	11.78	46.97	-	77.02
Orissa	4.31	0.00	22.57	47.33
Punjab	2.43	100.00	100.00	100.00
Rajasthan	6.91	0.68	-	6.18
Uttar Pradesh	11.38	58.59	-	76.45
West Bengal	3.33	0.00	0.00	0.00
All-India	100.00	22.28	30.20	34.00

Source: (1). For 1974, Government of India, *Report of National Commission on Agriculture*, 1976, Part XV, pp. 348-349. (2). For 1980 and 1985, Government of India, Ministry of Agriculture (Department of Agriculture and Cooperation).

Summing Up

The laws for abolition of intermediary tenures have been implemented fairly efficiently while in tenancy reforms and ceiling of holdings, legislation has fallen short of proclaimed policy and implementation of enacted laws has been tardy and inefficient. A large number of factors are responsible, the first and the most important being lack of political will. As the Sixth Plan noted: Often the necessary determination was lacking to effectively undertake action, particularly in the matter of implementation of ceiling laws and consolidation of holdings, and to pursue vigorously concealed tenancies and have them vested with tenancy/occupancy rights as enjoined under the law [Planning Commission, 1981, p. 115].

Secondly, the administrative agencies entrusted with the implementation of land reform measures are neither adequate nor trained to discharge the obligations in implementing these measures. The bureaucratic attitude towards the implementation of land reforms has been generally lukewarm and often apathetic. This is inevitable in the prevailing power structure where those who are in higher echelons of the administration are also substantial land owners or have close links with land owners. It is now a widely acknowledged fact that bureaucracy, especially the higher echelons of it, is a partner of the ruling class in the rural society, both by connivance as well as convenience [Rudra, 1989, Pp. 142-150].

Thirdly, the land reform measures in India have been a gift from the benign government and not the results of the class struggle or peasant movement as such except in a few localised belts. The beneficiaries of land reform measures, particularly tenants-at-will, share-croppers and agricultural labourers, are largely unorganised and politically inarticulate. Therefore, pressure from below is not forthcoming which can act as an effective fuel for forging ahead the demand for effective implementation of these reforms.

Fourthly, the absence of correct and updated land records has militated against the effective implementation of land reform measures, e.g., no tenant can secure the ownership right unless he can prove his existence in the revenue records. Therefore, the highly unsatisfactory state of revenue records, particularly in the erstwhile zamindari areas, is a major hurdle in the way of effective implementation of land reforms.

Finally, factors such as conceptual deficiencies in the land legislations, lack of financial support for their implementation, and stalling of these

measures by the judiciary have also played an important role in thwarting the effective implementation of land reform legislation.

NOTE

1. There are divergent views about the absolute proprietary rights of the landlords on the soil. See: Note of Dissent by Bijay Chand Mahatab and Brajendra Kishore Roy Chaudhary in Report of Land Revenue Commission, Bengal 1940, Vol. I, Pp. 191-272 especially Pp. 201-203.

2. These interpretations of the motives behind the introduction of Permanent Settlement have been questioned by recent economic historians. [Chaudhuri, 1982, Pp. 88-89].

3. According to other school of thought, the introduction of Permanent Settlement did not interfere with the rights of peasants and, therefore, did not reduce them to the status of tenants-at-will [Chaudhuri, 1982, Pp. 87- 178 and Floud, 1940, Pp. 17 and 191-272].

4. Under the settlement, each field was to be separately surveyed, output estimated and converted into cash. Each field was to be registered in the name of ryot who was asked to pay the rate of assessment [Dutt, 1906, Pp. 67-81 and 495-502], [Dharma Kumar, 1982, Pp. 218-20] and [Dutt, 1976, Pp. 234-237].

5. Between 1808 to 1818 Madras Board of Revenue argued for the introduction of collective settlement with the village communities known as Mauzawari Settlement but did not succeed [Dutt, 1976, Pp. 234-45 and Dutt, 1906, Pp. 67-68].

6. The enumeration in the census of 1871-72 was confined to adult male workers and in 1881 to male workers. In 1891, 1901 and 1911, the census enumerated population supported and in 1921, 1931, the working population.

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DOCUMENTATION

The purpose of this section is to make available to the readers official documents such as reports of committees, commissions, working groups, task forces, etc., appointed by various ministries, departments, and agencies of central and state governments which are not readily accessible either because they are old, or because of the usual problems of acquiring governmental publications, or because they were printed but not published, or because they were not printed and remained in mimeographed form. It will be difficult and probably not worthwhile to publish the documents entirely. We shall publish only such parts of them as we think will interest our readers. The readers are requested to send their recommendations of official documents or parts thereof for inclusion in this section.

In the present section, following two documents are published.

1. Planning Commission Report on Perspective Planning for Transport Development, 1988, Chapters XV to XIX (In Vol. III No. 3, we published Chapters I to XII and, in Vol. 3 No. 4, Chapters XIII and XIV of the Report).

2. Draft Statement on Housing Policy, Ministry of Urban Development Government of India, May 1990.

PERSPECTIVE PLANNING FOR TRANSPORT DEVELOPMENT

In 1988, Planning Commission, Government of India had set up a Steering Committee for Transport Planning. In the following is the Inland Water Transport, Ports, Shipping, Civil Aviation and Pipelines Sectors of Part II of the Report entitled Transport Sector.

XV INLAND WATER TRANSPORT

India is endowed with a variety of navigable waterways comprising river systems, canals, backwaters, creeks and tidal inlets. However, navigation by mechanised crafts is possible only over a limited length (5,200 kms of major rivers and 450 kms of canals) out of 14,500 kms of navigable waterways. The navigable waterways are confined to a few States and are location specific. The Inland Water Transport (IWT) is functionally important in regions covered by the Brahmaputra and the Ganges in the North-East and Eastern parts of the country, Kerala, Goa and in the deltas of the rivers Krishna and Godavari where it offers natural advantages. The total IWT traffic carried by mechanised fleet in 1985-86 estimated at 15.29 MT, is summarised in Table 15.1. Nearly 97 per cent of the total traffic carried on Mandovi-Zuari river system in the State of Goa is unidirectional in nature moving iron ore from mining areas to the Marmugao Port. The Hooghly-Brahmaputra river system carried only 2 per cent of the total IWT traffic.

TABLE 15.1. TRAFFIC CARRIED ON INLAND WATERWAYS SYSTEM

Water System	State	Volume of Traffic (m.tonnes)	Goods
Mandovi-Zuari river	Goa	14.76	Iron ore
Hooghly-Brahmaputra river	West Bengal & Assam	0.31	POL, cement, fertilizers
Rivers and Creeks	Maharashtra	0.07	General
West Coast Canal and Backwaters of Kerala	Kerala	0.15	Rock Phosphate

15.2 The studies undertaken by various agencies in the past have, confirmed that waterway is the cheapest mode of transport, specially when the originating and terminal points fall on the river front *vis-a-vis* other modes of surface transport, such as, rail and road. The area of operation is affected adversely by transhipment costs. Besides, it is pollution free and more importantly energy efficient. This is a highly attractive feature in the context of the escalating fuel bill. It is also considered to have the maximum employment potential, particularly for the weaker sections of the society. Evidently there is a case for a progressive diversion of traffic to inland waterways, wherever feasible.

15.3 In spite of the merits of the system, development of IWT has been very slow. It is observed that most of the existing vessels under IWT operations are out-dated. About 50 per cent of the operating vessels are in the age-group of 15 to 40 years. Their average speed is 4 to 5 knots. The crew requirement for these vessels is about 3 to 4 times compared to the modern vessels. Besides, most of the waterways suffer from navigational hazards like shallow water, narrow width during dry weather, siltation and bank erosion, inadequate vertical and horizontal clearances at a large number of overhead structures making it non-navigable throughout the year.

15.4 Little seems to have been done in the past to develop IWT. It was only since the beginning of the Second Five Year Plan that funds were provided to bring about some improvements in a few stretches. Up to the end of the Sixth Plan, a provision of nearly Rs 137 crore was made for IWT. However, in the Seventh Plan, a high priority has been accorded to the development of the system with a provision of Rs 226 crore which is almost three times the total expenditure incurred in the Sixth Plan. The Government of India (by an Act of Parliament in 1982) declared the Allahabad-Haldia stretch of the Ganga-Bhagirathi-Hooghly river as a National Waterway. For developing the infrastructure for navigation, this waterway has been divided into three stretches and an amount of Rs 15.58 crore

is provided for its development. In the Seventh Plan, the Brahmputra is proposed to be declared as National Waterway No. 2.

Central Inland Water Transport Corporation (CIWTC)

15.5 The Government of India also set up CIWTC in February, 1967 with an authorised capital of Rs. 4 crore for running river services in the North Eastern Region and general engineering operations including shipping repairs and construction of new vessels in the Rajabagan Dockyard of the Corporation. Major bulk commodities carried in the region are foodgrains, cement, fertilizers, packed lubricant oil, edible oil, tea, bamboo, jute, POL, iron & steel, etc. The Corporation has been running into losses mainly due to overaged vessels (42 per cent at the end of Sixth Plan) and the lack of infrastructural facilities.

Inland Waterways Authority

15.6 The Government constituted Inland Waterways Authority of India in October, 1986, as an apex autonomous organisation for planned development of inland waterways and inland navigation in the country. The Authority has been entrusted with the responsibility of development, maintenance and regulation of national waterways in the country besides advising Government on matters relating to inland water transportation. However, the Authority has yet to draw up a programme for development of inland waterways in the country. There is need to carefully review the activities taken up in the past in various States to develop IWT. Their overall impact on the local population and areas should be identified. Taking into account the results of such a review, the Authority should prepare a detailed perspective plan for the development of waterways based on the feasibility studies of recommended projects. A project of particular importance is the development of coastal shipping from Talcher Coalfields using rail-cum-inland waterways which needs an in-depth study from the point of view of its technical, financial and economic viability. In order to improve financial viability of waterways, it will be necessary to develop integrated terminals at suitable locations on water fronts interfaced with other modes of transport, for smooth and quicker movement of passengers and cargo. The concerned State Governments should set up suitable organisations to collect relevant basic data and monitor the operation of the schemes.

Future Traffic Flows

15.7 Future traffic forecasts presented here are based on the Report of the Consulting Engineering Services (India) Private Ltd. (CES) prepared for the Planning Commission. On the basis of likely economic development around the major riverine systems, the CES has estimated that a total traffic of the order of 68.7 million tonnes would be shared by the major river systems. In the increased traffic by 2000 AD the share of coal alone comes to 70 per cent. These projections are not based upon any location specific study. In projecting IWT traffic, it is important to consider the potential traffic between points of origin and destinations located along the waterways; for, where multiple handling of traffic is involved, economics of water transport gets distorted.

Riverine Development and Costs

15.8 According to estimates prepared by CES, out of the seven potential natural waterways[1], three did not have any traffic bottleneck, three displayed varying capacity potential, while the potential in traffic on the seventh is stated to be conditioned by the proposed locks and shiplifts on the river. For enabling national waterways to meet the future traffic demand, a budget of Rs. 2,464 crore (to be completed in two phases) has been proposed in the CES's Report. About 80 per cent of this budget is planned for the development of Brahmani-Mahanadi and Narmada river systems.

Technology Development

15.9 A crucial factor that has to be taken into account is the absence of latest technological capability in the country for river conservancy and waterways management. Technological

upgradation of the IWT fleet is necessary in respect of design of vessels, terminal handling, building and repair facilities, etc. Propulsion system has to be employed in order to increase efficiency of the craft, particularly with the shallow draft. In this regard, hydrojet propulsion system has been successfully introduced in some of the European countries in shallow draft rivers. Vessels, with such propulsion system, are being acquired for deployment in the stretch between Patna and Allahabad under the Dutch Aid Programme. The present trend is to replace wooden hulls by steel hulls/fibre reinforced plastic (FRP) hulls/ferro concrete hulls, etc. The shape and size of the vessel also plays a vital role in the economy and efficiency of the system. Introduction of modern equipment and electronic gadgets including very high frequency (VHF) communication system, radar, scanners, etc., will increase the operational skills of the crew and reduce the vessels, turn round time.

15.10 Training of crew for improving their operational skills is most essential. In this connection, it is necessary to set up modern, well organised crew training centres to train the personnel for operating the new designed vessels. It is equally important to maintain a competent design organisation for improving the efficiency and productivity of the fleet system. A special stress has to be laid on improvement of craft design in respect of dimensional parameters, propulsion system, construction materials, etc. The organisation should be provided with facilities for research and development.

Role of Country Boats and Need for Mechanisation

15.11 The services of country boats are indispensable for carrying inter and intra-regional cargo and operating as feeder services, particularly in areas between the terminals or in remote areas or waterways having a low draft and narrow width. We feel that the mechanisation of the country boats should be resorted to keeping in view the types and quantum of cargo to be transported, regular demand for such traffic and economy in cost and time. Benefit-costs should be appraised before taking a decision in this regard for the particular stretches of inland waterways. Simultaneously, arrangements will have to be made for providing training to boat owners to handle on-board engines including maintenance.

Conclusion

15.12 In sum, inland waterways have a significant role to play in several parts of the country since it offers an economic, energy efficient, employment intensive and pollutant-free transport service. It is, therefore, important to put in productive use the waterway potential of different regions in the country. In each region, the inland water transport services should be fully integrated with the rail and road facilities from the point of view of economy as a whole. The Government of India has already declared the Ganga-Bhagirathi-Haldia waterway as a National Waterway. The declaration of the other waterways as National Waterways should be based strictly on the criteria that they are important as means of transportation and would contribute to the economic development of the regions. The Inland Waterways Authority should draw up priorities in this regard based on benefit-cost studies. Comprehensive conservancy works should be initiated including hydro-graphic surveys, maintenance channels and setting up of navigational aids. Integrated terminals at suitable locations on water fronts should be established, interfaced with other modes of transport for smooth and quicker movement of passengers and cargo. Efforts should be made to develop latest technological capabilities in respect of design of vessels, river conservancy and waterways management. It is also necessary to set up modern training centres for personnel involved in the operation of IWT.

15.13 Finally, we would recommend that IWT should receive the treatment of a nascent industry as it is conceivable that some of the waterways may not be financially viable in the initial period. Principles and methods of financial support for a specified period should be determined on an urgent basis.

XVI PORTS

India has a vast coastline of about 6,000 kms with 10 major and 139 operational intermediate/minor sea-ports. The operation and administration of major ports is governed by Major Ports Act, 1963 with the Ministry of Surface Transport exercising overall control on their working. The minor/intermediate ports are administered by the Governments of the concerned maritime States directly. At the time of Independence, India had five major ports. Calcutta, Bombay and Madras were the old ports while Cochin and Vishakhapatanam had been developed during the Inter-War period. Since then, six more ports - five major and one satellite - have been added, namely, Kandla (1959), Mormugao (1963), Paradip (1966), New Mangalore (1975), Tuticorin (1975) and Haldia (1977).

Traffic Handled at Major Ports

16.2 In 1985-86, the total traffic handled by all the ports in the country was 128 million tonnes (MT), out of which the share of major ports was 120 MT or over 93 per cent. The traffic handled at the major ports increased from 39.5 MT in 1960-61 to 124.22 MT in 1986-87. Port-wise break-up is given in Table 16.1.

TABLE 16.1. TRAFFIC HANDLED AT MAJOR PORTS

Sl. No.	Port	Traffic (MT)		Share (per cent)	
		1960-61	1986-87	1960-61	1986-87
1.	Calcutta/Haldia	9.40	12.01	23.8	9.7
2.	Paradip	-	4.85	-	3.9
3.	Vishakhapatanam	2.80	15.04	7.1	12.1
4.	Madras	3.00	19.77	7.6	15.9
5.	Tuticorn	-	4.15	-	3.3
6.	Cochin	2.00	6.80	5.1	5.5
7.	New Mangalore	-	5.43	-	4.4
8.	Mormugao	6.40	14.92	16.2	12.0
9.	Bombay	14.30	25.06	36.2	20.2
10.	Kandla	1.60	16.19	4.0	13.0
	Total	39.50	124.22	100.0	100.0

Source: *Seventh Five Year Plan*, Planning Commission.

Bombay continues to be the premier port although its share in the total traffic has come down from 36 per cent in 1960-61 to 20 per cent in 1986-87. Madras and Kandla have emerged as the other frontline ports while Calcutta (including Haldia) has come down from second position in 1960-61 to sixth in 1986-87.

16.3 Commodity-wise composition of traffic has also undergone a change over the years. Table 16.2 below gives the commodity-wise break up of total traffic handled by the major ports since 1960-61.

TABLE 16.2. COMMODITY-WISE COMPOSITION OF TRAFFIC

Sl. No.	Commodity	Traffic Handled (MT)			Share (per cent)	
		1960-61	1979-80	1986-87	1960-61	1986-87
1.	POL	10.90	28.78	55.51	27.6	44.5
2.	Iron ore	6.30	23.18	30.60	15.9	24.5
3.	Coal	2.10	2.05	9.42	5.3	7.5
4.	Fertilizers	0.60	6.36	4.99	1.5	4.0
5.	Foodgrains	5.10	1.20	0.60	12.9	0.5
6.	Other cargo	14.50	16.92	23.70	36.8	19.0
	Total	39.50	78.49	124.82	100.0	100.0

Source: For 1960-61 and 1979-80, *Seventh Five Year Plan*, Planning Commission. and for 1986-87, the *Handbook of Management Information*, May, 1987, Ministry of Surface Transport.

Between 1960-61 and 1985-87, the share of POL, iron ore, coal, and fertilizers has increased. POL now constitutes the largest item in ports traffic. Iron ore comes next. Growth rate of iron ore slowed down recently because of a global trend towards reduced material intensity of manufactured goods and competition from other iron ore exporting countries. Coal is mostly handled by coastal ships for thermal power stations located near the coast. After a marginal decline from 2.10 MT in 1960-61 to 2.05 MT in 1979-80, coal traffic increased to 9.42 MT in 1986-87. The traffic in fertilizers attained a spectacular growth rate of 13.2 per cent per annum during 1961-1980 but, thereafter, it has shown a declining trend, mainly due to an increase in domestic production of fertilizers with the commissioning of gas-based plants; the total traffic of fertilizers in 1986-87 was well below the 1979-80 level. General cargo was stagnant during the sixties and the seventies but it picked up during the eighties, mainly due to a fast growing trend towards containerisation. Starting from 157,000 Twenty-Foot Equivalent Units (TEUs) handled by all the ports in 1980-81, container throughput increased to 453,000 TEUs in 1986-87.

Port Capacity

16.4 Capacity of a port is the aggregate capacity of individual berths and depends on the type of commodity handled and the facilities provided. It is generally accepted that port capacity should be created ahead of demand because the cost, in terms of delays to ships, far outweighs any savings due to delayed investments. At the same time, it is necessary to safeguard against chronic underutilization of a facility to protect the financial viability of a port. At the end of the Sixth Five Year Plan, the total handling capacity of the major ports was 133 MT while the total traffic carried in the last year of the Sixth Five Year Plan was 107 MT. Thus, the overall capacity was more than the traffic handled. However, while there was surplus capacity in handling iron ore and break-bulk traffic, the capacity for handling POL and containers was not adequate and required to be increased. Further, selective deepening of ports to accommodate dry-bulk carriers and container ships was needed. In the Seventh Plan period, the total handling capacity of the major ports is expected to increase from 133 MT to 155 MT. POL capacity will have the maximum increase of 12 MT including 4 MT each at Haldia, Vishakhapatnam and Madras. Container capacity will increase by about 5 MT with the largest increase taking place in Bombay/Nhava - Sheva. Capacity of fertilizers and coal will increase by 4 and 1 MT respectively. Nhava-Sheva, which is due to be commissioned by 1989, will be a new major port with the state of art berthing facilities and handling equipment for dealing with the container and fertilizers traffic.

16.5 Commodity-wise position of the revised anticipated capacity and throughput in 1989-90, the last year of the Seventh Plan, is given below in Table 16.3

TABLE 16.3. FORECAST OF CAPACITY AND TRAFFIC IN 1989-90 (REVISED)

(million tonnes)

Sl. No.	Commodity	Capacity	Traffic
1.	POL	67.25	64.00
2.	Iron ore	41.50	33.00
3.	Coal	7.25	13.00
4.	Fertilizers	8.00	5.00
5.	Other break-bulk	22.20	20.50
6.	Containerised	8.70	9.50
	Total	154.90	145.00

Thus, at the end of the Seventh Plan, there will be surplus capacity for handling POL, iron ore and fertilizers. While excess capacity of POL is likely to be quickly overtaken, that in iron ore and fertilizers might persist for some time. Additional capacity will be needed, particularly for handling coal and container traffic in the Eighth Plan.

16.6 Regarding modernisation of port facilities and matching them with the emerging shipping technology, the ports of Kandla, Cochin, Nhava-Sheva, Madras, Paradip and Haldia will be provided with fully mechanized handling facilities. Further, selective deepening of ports will enable them to receive larger sized vessels as under (Table 16.4)

TABLE 16.4. SHIP TYPES TO BE HANDLED AT VARIOUS PORTS

Sl. No.	Types of vessels		Ports capable of receiving them by 1990
1.	Third generation container vessels		Nhava-Sheva, Madras
2.	Second generation container vessels		Bombay
3.	Combination and small sized container vessels		Calcutta, Haldia
4.	Iron ore vessels of 130,000 DWT		Madras
5.	Fertilizer raw material vessels:		
		40,000 DWT	Paradip
		60,000 - 80,000 DWT	Nhava-Sheva
6.	Tankers	100,000 DWT	Madras
		150,000 DWT	Vishakhapatnam

16.7 The Ports Planning Group (PPG) has prepared traffic forecasts in consultation with the major port authorities. These are as shown in Table 16.5 below:

TABLE 16.5. TRAFFIC FORECASTS FOR 2000 AD

(million tonnes)

Sl. No.	Commodity	1989-90	1994-95	1999-2000
1.	POL	76.12	103.50	141.00
2.	Iron ore	38.00	43.41	49.60
3.	Coal	12.50	22.03	32.25
4.	Fertilizers	12.18	14.57	18.80
5.	Foodgrains	-	1.00	2.55
6.	Steel	*	5.00	7.00
7.	Break-bulk cargo	21.65	26.00	37.80
8.	Containerised cargo	11.01	24.00	37.20
	Total	172.06	239.51	326.15

* Included in break-bulk cargo.

Total throughput of ports in 1985-86, the base year of PPG's projections, was 120 MT. The forecast for 1999-2000 is 326 MT. This implies an increase fo 170 per cent over a period of 14 years or an annual compound growth rate of 7.4 per cent. The annual growth rates of the total port traffic in the past were 3.7 per cent during 1961-80, 6.8 per cent during 1980-87 and overall 4.5 per cent during 1961-87. Prima facie, the projected growth of 7.4 per cent during the period 1986-2000 appears to be on the high side.

16.8 The PPG has estimated that development of port facilities at major ports to meet the projected needs of traffic will involve an investment of the order of Rs. 4000 crore. However, it has not prepared a list of development projects. In absence of identification of projects and their *inter-se* priorities, it is difficult to estimate the investment needs for port development during the Eighth and Ninth Plans. Recently, a decision has been taken to undertake a systematic plan for long-term development of major and intermediate ports in the country with technical assistance from the Asian Development Bank. The results of this study will need to be awaited before a perspective plan for the ports sector can be developed.

Port Productivity

16.9 Many performance indicators are used for judging port efficiency, such as, cargo handled per ship berth day, average pre-berthing waiting time, average turn-round time and percentage of idle time at berth to total time at berth. However, the most representative indicator of a port's performance is the volume of cargo handled per ship berth day. Other indicators are influenced considerably by the arrival pattern of ships and the infrastructure over which the port has very little control, at least in the short run. In 1985-86, the average cargo handled per ship berth day was:

oil tankers (wet-bulk) 11,276 tonnes, dry bulk cargo 2,703 tonnes and break-bulk cargo 516 tonnes.

Oil Tankers

16.10 Crude oil as well as POL products are pumped from the vessel to the shore refinery via the pipeline system directly by the pumps in the vessel. Output is determined by the pumping capacity of the ship, the size of the shore pipeline and the storage capacity of the refinery. If these do not match, the throughput of the system is sub-optimal. Oil handling facilities are provided at all the ports except Paradip. There is a proposal to replace 24 inches diameter pipeline with 36 inches diameter pipeline in Bombay. At Madras, there is scope for optimising capacity utilisation of pipeline by increasing the existing discharge rate of 2,500 tonnes per hour to 4,000 tonnes per hour. The Budge Budge jetty at Calcutta is over 100 years old and its strengthening can improve its capacity. Elsewhere, increase in throughput requires additional jetty.

Iron Ore

16.11 Dry-bulk mainly refers to iron ore, fertilizers and foodgrains. Iron ore is handled only at the fully mechanised bulk handling systems provided at Paradip, Vishakhapatnam, Madras, New Mangalore and Mormugao. The difference between the rated capacity and the actual output arises due to operational or breakdown delays. The National Institute of Port Management (NIPM), Madras, recently conducted a study of the performance of iron ore handling systems at the above ports (except the port of New Mangalore). It found that, during the period April, 1985, to December, 1986, breakdown delays of the shipping systems accounted for 30 per cent and 34 per cent of the total ship time at berth at the ports of Paradip and Vishakhapatnam respectively. At Madras, such delays accounted for only 6 to 7 per cent of the total ship time at berth. Separate data for breakdown delays at the port of Mormugao were not available. *Prima facie*, there is considerable scope for improving the productivity of iron ore handling system at Paradip and Vishakhapatanam.

Other Dry-Bulk

16.12 For handling fertilizers (including raw materials), apart from providing specialised, mono-commodity berths at Haldia, Vishakhapatanam, Madras, Cochin and Kandla, semi-mechanised bulk handling systems are provided at Haldia and Kandla. These handling systems are outmoded and of low capacity but even these are utilized sparingly because the traffic is thinly distributed over all the ports in spite of the fact that its movement is organised through Government channels. For example, in 1985-86 the port-wise distribution of fertilizer traffic in metric tonnes was: Calcutta 0.61, Haldia 0.16, Vishakhapatnam 0.97, Madras 0.97, Tuticorin 0.52, Cochin 0.51, New Mangalore 0.22, Morumgao 0.31, Bombay 1.05 and Kandla 0.63 Consequently, most of it was handled by inefficient conventional, labour-intensive methods thus resulting in low productivity. There is considerable scope for rationalisation of movement of fertilizers, foodgrains, cement and such other commodities as are amenable to bulk handling. At selected ports, fully mechanized, modern handling systems and multi-commodity berths should be provided taking an integrated view so that they can handle not only fertilizers but also other dry bulk commodities. This will not only increase the port throughput per ship berth day but also avoid under-utilization of capacity due to traffic fluctuations.

16.13 As regards coal, mechanized bulk handling system for coal loading is provided only at Haldia. Out of the total coal throughput of 7.5 MT in 1985-86, Haldia, Tuticorin and Vishakhapatnam handled 2.25 MT, 2.41 MT and 1.74 MT respectively. This traffic will increase in the coming years as a number of new thermal plants are proposed to be established along the coast in the Southern and Western regions of the country which will depend upon coal supplies from Talcher Coalfields in Orissa. A recent study by RITES projects a total coastal movement of coal

of 49 million tonnes by the year 2000 and recommends development of handling facilities at Paradip and a number of ports at the receiving end.

Break-Bulk Cargo

16.14 Handling of break-bulk cargo as well as conventional handling of dry-bulk cargo are high cost, low productivity operations. Low output is due to low productivity of the handling equipment and the labour. In 1985-86, the average availability of handling equipment for break-bulk cargo, namely, wharf cranes, mobile cranes and fork lift trucks was 81, 60 and 65 per cent respectively. While the availability was satisfactory for electric wharf cranes, it was somewhat low for mobile cranes and fork lift trucks. Further, the overall utilisation of all the three categories of equipment was low, being in the range of 29 to 31 per cent, mainly because the equipment was outmoded and incompatible with the volume and size of the cargo to be handled. There is an obvious needs for all the ports to carefully assess their peak load requirements of traffic volume and mix, discard outmoded, low capacity items of equipment and replace them with fewer modern, higher capacity ones in accordance with a systematic plan. It will result in a slimmer, modern fleet whose availability could be easily improved by upgrading the skills of the workshop staff and the operators.

16.15 The role of labour productivity is crucial in the handling of break-bulk general cargo. Labour productivity at the ports is extremely low due to outmoded datum lines, excessive manpower and compartmentalisation of cargo handling between dock and shore labour. Incentive schemes were introduced in the fifties wherein the worker whose output exceeded the prescribed datum line was paid at a higher rate for the extra output. Over the years, sophisticated cargo handling equipment was introduced at the ports but these datum lines were not revised upwards due to trade union pressure. Ports elsewhere in the world have reduced their manpower drastically over the years, but the total manpower at the major ports in India went up from 1,07,319 in 1971 to 1,12,985 in 1981 and 1,19,588 in 1985. Due to excessive manpower, the outmoded manning scales are still being insisted upon. In view of the need for modernization of ports, it is necessary to prepare well thought out plan for manpower training and deployment at each major port in the long term perspective of 2000 AD.

16.16 There are, of course, formidable practical problems to be reckoned with. Port and dock labour are represented by powerful federations and unions. Their manning scales, piece rates/incentive schemes and other service conditions are regulated by the existing agreements, settlements, tribunal awards and past practices. Under the existing provisions of the Industrial Disputes Act, it is not possible to terminate any award or agreement unilaterally. They can be replaced only by fresh negotiation or adjudication. The unions have not been agreeable to any upward revision of datum lines or rationalisation of manning scales in response to the technological changes. Starting from the Chatterjee Committee in 1976, a number of expert bodies have recommended that the dock and the port labour should be integrated to facilitate optimal manpower interchangeability. Nevertheless, it is imperative that the Government comes to grips with the problem and rationalises datum lines and manning scales.

Containerised Cargo

16.17 Container handling is highly capital intensive and requires specialised berths and expensive handling equipment which can be justified only at high levels of throughput. Container facilities at various ports should be provided taking an integrated view of major, intermediate and minor ports to serve the needs of each region. It is imperative that such equipment is optimally utilised to ensure that the container transportation is cost-effective. Container operations are also handicapped by excessive manning scales in Bombay, Cochin and Calcutta where the unions have been insisting on application of break-bulk based manning scales on the container traffic as well. This has made the container handling operations inefficient and cost-ineffective for the shipper. There has been resistance from labour to shifting of

stuffing/destuffing activities inland, both at Cochin and Bombay. As a result, the traffic at Cochin is getting diverted to New Mangalore and Madras where the manning scales are more reasonable.

Financial Issues

16.18 Prior to 1951, major ports in India financed their capital investments from internal resources or by raising funds from the market. Since then the system of market borrowing has fallen into disuse and budgetary support from the Central Government has become the major source of financing port investments, apart from internal resource generation. The interest rate on loan capital has been revised from time to time and presently stands at 10.5 per cent. In 1985-86, the total surplus of ports, net of all current operational expenses, depreciation on historical costs of assets and interest liabilities, was Rs 141 crore contributed mainly by Bombay, Madras and Kandla. The overall resources available with major ports left little scope for repayment of loans or for financing modernisation and capacity expansion.

16.19 The existing accounting system of ports is not helpful in commodity-wise costing. However, according to a recent study in the Planning Commission, POL and iron ore handling was profitable while heavy losses were incurred in most of the ports on general cargo and, to a less extent, on fertilizers. Mechanised handling of POL and iron ore makes their operations cost-effective while in the case of general cargo and fertilizers the unit costs are much higher than those of POL and iron ore due to sizeable manual handling. There is need to improve the financial viability of ports and bring the commodity tariffs closer to their costs. However, in revising the tariffs, it is important to consider the scope for cutting down the handling costs incurred by the users through improved labour productivity and mechanisation. The existing tariff structure at the ports must be revised before any large scale investments are made.

Perspective Planning

16.20 Integrated planning of the port sector at the national level is necessary for optimising investments in the port sector. Since the port projects have long gestation periods and are location specific, it is necessary that port investments are based on realistic demand forecasts consistent with the developmental plans of other sectors of the economy. The selection of the individual projects and their priortisation should be in line with the long term strategic plan for each port. The port planning process has some obvious weaknesses. No perspective plan indicating the long-term objectives, resource optimisation strategies and system parameters has been prepared for the ports sector so far. Master plans for long-term development of individual ports have been prepared for some of the ports in recent years, but these are not supported by any realistic forecasts of traffic, taking an integrated view of port development with development of other sectors. Thus, sizeable divergence between Plan forecasts and the actual materialisation of traffic has been a chronic weakness of the ports sector, causing idle capacity at some ports and congestion at others.

16.21 At the port level, project planning is primarily the responsibility of the department using the facility. Thus, planning of berths, navigational facilities and handling equipment is done by the Traffic, Marine and Mechanical departments respectively. Most of the ports have separate Research & Planning Cells which coordinate preparation of the Five Year Plans and the Annual Plans and also undertake productivity studies. However, their role in project planning is minimal. Even though the user departments consult other departments for technical inputs for specific projects, the system is not conductive to integrated planning with reference to well-defined corporate goals and system parameters. There is no central port planning body of trained professionals to continuously monitor the traffic trends and development plans of user Ministries/Departments as an ongoing process and make mid-course corrections in investment priorities to avoid wastage of resources. As regards the Development Adviser to the Ministry

of Surface Transport, his role is confined to the appraisal of projects and monitoring their implementation.

16.22 The need for a centralised authority for integrated port planning has been emphasized by a number of expert bodies. A decision has been taken by the Ministry of Surface Transport recently to set up National Ports Authority (NPA) for integrated development of ports. NPA will need to have a strong professional staff. It should be responsible for developing the necessary data base for planning and assisting various port authorities to organise planning at the port level on a systematic basis. Apart from integrated development of the ports sector, the NPA should also introduce procedural uniformities and set performance standards for individual ports. The Committee in endorsing the Ministry's decision would like to underline the need for making the NPA operational urgently.

XVII SHIPPING

In 1947, India hardly had a merchant marine worth the name and its total fleet comprised a few old and antiquated vessels aggregating about 0.2 million gross registered tonnes (grt). Over the years, the Indian fleet expanded rapidly and reached a level of 5.9 million grt in April, 1986. However, from 1980 onwards the expansion of the Indian fleet has been rather slow. As on April 1, 1987, the Indian fleet comprised 392 ships aggregating 9.7 million dead weight tonnes (dwt) and India ranked 15th amongst the maritime nations of the world.

Structure of the Indian Shipping Industry

17.2 India has a large number of ship-owning companies and as on April 1, 1987, there were 52 such companies. The largest shipping company in India viz. the Shipping Corporation of India Ltd. (SCI), a company in the public sector, owned 143 ships aggregating 5.3 million dwt; the remaining 4.4 million dwt was distributed amongst the companies in the private sector, two companies in the public sector and several government departments. However, most private sector companies are small. The SCI and 8 other large private sector companies together owned 8.3 million dwt which constituted 85 per cent of the Indian tonnage; the remaining 15 per cent was distributed amongst 43 companies.

17.3 Financially, the Indian shipping industry is in difficulty. According to the data available, in 1984-85, the equity: debt ratio of the industry taken as a whole was 1:67. After taking into account the losses incurred by several shipping companies in the following two years, the net worth of the shipping industry, as a whole, in 1987 would, perhaps, be negative. Several companies have not been in a position to pay interest on outstanding loans and the debt burden has, in the intervening period, mounted. The companies in difficulty are, by and large, one or two small ship-owning companies indicating, perhaps, the comparative resilience of larger, more diversified companies. However, the SCI has been earning profits for the last three years and also expects to do so during the financial year 1987-88. Similarly, some companies in the private sector are also earning profits and it could be stated that about two thirds of the Indian tonnage is owned by companies which are profit-making.

17.4 The present ailment of shipping companies arises out of the following factors:

(a) A deep and prolonged global recession in shipping.

(b) The financing pattern of Indian shipping companies which has resulted in a lopsided capital structure.

(c) Government policies which place a significant burden on the Indian shipping industry.

The International Shipping Scenario

17.5 Between 1965 and 1973, the world seaborne trade grew rapidly at a compound rate of 12.9 per cent per annum but the growth in shipping tonnage during this period lagged behind at 10.1 per cent per annum. As a result, world shipping markets were booming and shipowners were earning high profits. During the 14 years, subsequent to the first oil crisis of 1973, the world seaborne trade has stagnated. This stagnation could not have been foreseen in 1973; hence cash rich shipowners placed orders on shipyards and in 1973 some yards were booked

right up to 1978. The delivery of these ships in a stagnating market led to a glut in shipping tonnage and also a steep fall in freight rates, so much so, that freight rates could not at times cover even the operating cost of ships. Technological innovations, particularly, containerisation in the case of liner ships which had led to faster turnround and higher capacities further added to this glut. Hence, during the last 14 years, except for two years between 1979 and 1981, the global shipping industry has passed through rather difficult times which, in turn, has badly affected the cash flows of most shipping companies in India and abroad.

The Financing Pattern of Indian Shipping Companies

17.6 The problems of the Indian shipping companies are further aggravated by the fact that the erstwhile Shipping Development Fund Committee (SDFC), which provided the bulk of financial assistance to the Indian shipping companies had adopted a very special equity: debt ratio norm of 1:6. This norm was adopted sometime in the 1950s with a view to promoting growth and development of the Indian shipping industry. At that time, the seaborne cargo was expanding rapidly and there was a corresponding growth in shipping tonnage. In addition, the loans provided were on very soft terms, i.e. loans carried low interest rates and had long maturity period. Hence, despite a very special equity: debt ratio of 1:6, the favourable environments and the soft terms combined to help the shipping companies in meeting their debt servicing obligations. But when the scenario changed in the post-1973 period, the following factors combined to alter the fortunes of the Indian shipping companies:

(a) Freight rates have fallen leading to shipping companies incurring losses; cash flows have plummeted and so has the ability of shipping companies to service debts.

(b) Interest rates on loans to shipping companies have risen substantially as compared to the pre-1973 period; this has reduced profitability while increasing debt service obligations.

(c) The shipping industry also borrows funds from the international market either as yard credit or as commercial loans. In recent years, wide fluctuations in parity rates between currencies and floating interest rates on commercial loans have exposed shipping companies to greater risks.

Special Problems Faced by the Indian Shipping Industry

17.7 The Indian shipping industry operates under certain constraints which are peculiar to it either due to certain obligations which are placed on it through Government policies or some special disadvantages suffered by it *vis-a-vis* its foreign competitors. The special problems of the Indian shipping industry are discussed below:

(a) The Government has laid down *pari-passu* obligation which requires an Indian shipowner to place orders with Indian public sector shipyards when acquiring ships from abroad. As a result of this *pari-passu* obligation, which has been in force since 1977, several Indian shipping companies were required to acquire indigenously built ships. However, the acquisition of indigenously built ships at prices much higher than the prices of comparable ships in the international market has strained the working of the Indian shipping companies. It is estimated that the prices paid to Indian yards are 40 to 50 per cent higher than those of foreign built ships. Also, Indian shipyards quote much longer delivery period than the foreign yards and, in the process, the Indian shipping companies miss out the opportunity to deploy ships earlier. Moreover, since price related costs (interest, depreciation and insurance) form a large chunk of ship operating costs, ships priced higher are at a disadvantage, particularly when they earn the same freight rates which prevail in the international market.

(b) Indian ships are required to be repaired at Indian yards which are not competitive either in terms of cost or time.

(c) The Shipping Corporation of India Ltd. has to operate loss-making services to the Andaman and Nicobar and Lakshadweep islands for socio-political reasons. According to the formula presently in vogue, the SCI is required to absorb the entire loss on these socio-political services in years in which it earns an overall profit and 20 per cent of the losses in years in which it incurs an overall loss (including loss on such services).

Since these losses are large (about Rs. 14 crore per year), they place a heavy burden on the finances of the SCI and inhibit its ability to expand.

(d) At Indian ports, Indian liner ships are often required to compete with foreign lines at a disadvantage. This is mainly because India does not have a scheme to provide cargo support to its national shipping industry. As a result, Indian ports are open to all and sundry to pick up whatever cargo they can, often exposing Indian shipping lines to unfair and unethical competition. As several countries provide overt or covert cargo support to their ships, Indian ships are at a comparative disadvantage in their ports. Also, at Indian ports several foreign lines or agents are reported to be giving kickbacks in foreign currency. Because of our foreign exchange regulations, Indian lines, and particularly the public sector shipping company, cannot adopt similar practices. Hence, even at Indian ports the foreign lines have a competitive edge over the Indian lines.

Future Trade Flows

17.8 Over the years, the world seaborne cargo has been stagnating and, in line with this global trend, Indian seaborne cargo has also expanded slowly. With a trend towards declining material intensity of GNP, particularly in the developed countries, global seaborne cargo may expand rather slowly in the years ahead. The structure of global trade flows has also been changing with more and more trade in high value added items. So, while in value terms, world trade continues to expand, this expansion in trade does not generate a corresponding expansion in seaborne cargo. This trend, which also generally encompasses the Indian scenario, is likely to continue or even accelerate in future. Thus, while India's foreign trade would expand in money terms in the time-frame of 2000 AD, the expansion in seaborne cargo would be slow.

17.9 Future cargo flows for India's overseas trade have been estimated under two scenarios. In the first scenario, GDP growth has been assumed at 5 per cent per annum and in the second at 6 per cent per annum. In the first scenario, Indian seaborne cargo will increase to 97.3 million tonnes by 2000 AD; in the second scenario, seaborne cargo is likely to increase to 109.2 million tonnes. Projections regarding India's overseas seaborne trade under the two scenarios are given in Table 17.1 below:

TABLE 17.1. INDIA'S PROJECTED OVERSEAS SEABORNE TRADE

(million tonnes)

Cargo	1985-86	2000	
		Low Case	High Case
I General Cargo			
- Exports	4.4	8.0	8.0
- Imports	9.3	11.0	11.0
- Total	13.7	19.0	19.0
II Crude Oil and Petroleum Products			
- Exports	2.5	2.0	2.0
- Imports	19.0	30.7	42.6
- Total	21.5	32.7	44.6
III Bulk Cargo*			
- Exports	28.8	35.1	35.1
- Imports	9.7	10.5	10.5
- Total	38.5	45.6	45.6
IV Total Overseas Seaborne Cargo			
- Exports	35.7	45.1	45.1
- Imports	38.0	52.2	64.1
- Total	73.7	97.3	109.2

* Excluding crude oil and petroleum products.

17.10 A major component of dry bulk cargo has been iron ore exports. Over the last few years, global steel production has been stagnating and steel production in industrial countries, which are large importers of iron ore, has been falling. As a result, seaborne trade in iron ore has also been stagnating; in the last two years, it has actually fallen. The regression model evolved for projecting iron ore exports takes into account the emerging changes in steel production technology which has shifted the emphasis in production of steel from iron ore to scrap; it also takes into account the declining steel intensity of GDP in the developed countries on account of development of substitutes like plastics, ceramics and composite materials and also the change in the structure of GDP which places a lower emphasis on consumption of steel. Also, separate regression models were evolved for iron ore exports to different parts of the world. The results obtained from the regression analysis were thereafter integrated to arrive at the figure of total Indian exports in the time-frame of 2000 AD. The results show that the exports of iron ore are expected to increase from 27 million tonnes in 1985-86 to 35 million tonnes in 2000 AD, representing an increase of about 30 per cent. However, these projections are lower than the projections of iron ore exports of 45 million tonnes in 2000 AD made by the Minerals and Metals Trading Corporation (MMTC).

17.11 There is a large difference between the petroleum products consumption forecast arrived at in the above projections and the forecast obtained from the Oil Coordination Committee (OCC). The above projections are based on intrinsic compound growth rates of oil consumption of about 3 per cent per annum (low case) and about 4 per cent per annum (high case), while the OCC forecast is based on a 5.6 per cent annual compound growth rate. It may, however, be mentioned that during the thirteen year period from 1972-73 to 1985-86, the consumption of petroleum products in the country has increased at a compound growth rate of 4.9 per cent per annum. The lower growth rate of consumption arrived at for the purposes of the above projections has to be viewed in the following perspective.

(a) India has large reserves of natural gas. Although consumption of natural gas in 1985-86 was about 4.5 million tonnes of oil equivalent, according to some projections, natural gas consumption by 2000 AD could increase to about 40 million tonnes of oil equivalent. Even assuming that three-fourths of this anticipated natural gas consumption materialises and three-fourths of the additional consumption of about 25 million tonnes of oil equivalent is utilised as a substitute for petroleum products, the total incremental substitution of petroleum products by natural gas could be in the range of 19 million tonnes per annum. If this consumption is added to the projected consumption of petroleum products which is anticipated to be 64 million tonnes (low case), the total consumption of petroleum products and natural gas as substitute could rise to 83 million tonnes which would equate to a compound growth rate of 4.8 per cent per annum and an oil: GDP elasticity coefficient of 0.97. In the high case, the total consumption would be 95 million tonnes and this would equate to a compound growth rate of 5.9 per cent per annum.
(b) While natural gas would be available locally, the incremental requirement of crude oil and petroleum products would have to be imported.
(c) In 1985-86, the crude oil and petroleum products import bill aggregated Rs. 4,990 crore which represented about 45 per cent of India's total export earnings estimated at about Rs. 11,000 crore. The Oil Coordination Committee scenario projects an import of 33.7 million tonnes of products and 27.4 million tonnes of crude in 2000 AD. Correspondingly, the resultant foreign exchange requirements for import of oil will be too high, requiring much larger percentage of total export earnings and will be difficult to sustain.

Coastal Cargo

17.12 Coal is the major commodity moving on the Indian Coast and the movement in 1986 was about 2.3 million tonnes. The Central Electricity Authority (CEA) has plans for setting up a number of coastal power plants in the time-frame of 2000 AD. It may be economical to transport coal to these coastal power plants by deploying dedicated coastal colliers. Coal could be loaded from the

East Coast ports of Haldia and Vizag and Paradip consigned to Tuticorin, Goa and ports in Saurashtra. So far, firm decisions regarding the setting up of the coastal power plants have not been taken. Considering the long lead time in setting up power plants, it would be reasonable to expect that these plants would commence operation only beyond 1995. For the purposes of working out tonnage requirements, coastal coal movement of about 12 million tonnes per annum has been assessed in the time-frame of 2000 AD. A recent study done by RITES for CEA projects requirements of coastal movement of coal of 49 million tonnes by the year 2000 AD. The bulk of this coal will be supplied from Talchar Coalfields through Paradip Port. The feasibility of the detailed project recommended by RITES needs to be evaluated carefully. It may be noted that it is easy to acquire ships to cater to this movement but development of ports and infrastructural facilities is likely to take much longer time. Hence, as soon as decisions regarding setting up of coastal thermal power plants are taken, decisions concerning port development should also be taken simultaneously. An important question to consider in this context is the economics of the proposed thermal plants based on coal moved by the coastal routes.

17.13 There are no prospects of movement of general cargo or other bulk commodities on the Indian coast. Although at present there is no movement of general cargo, it is perhaps possible to revive this movement in 5 tonne containers used by the Indian Railways. Such a method of transport would have several advantages which include ease of handling at Indian ports, quick transit time as well as little or no additional expenditure. This method of transport of coastal cargo requires detailed examination.

Technological Innovations in Shipping

17.14 The world is undergoing very rapid technological changes and the pace of these changes is expected to be even more rapid during the next decade and a half. The emerging changes are expected to lead to a breakthrough in the area of new materials, ceramics, engineering plastics, electronics, computers, superconductors, fibre optics and space technologies. Developments in these technologies will also benefit the shipbuilding and shipping industries.

17.15 The drive towards fuel efficiency would continue to play an important role in future technological innovations. The quest for fuel efficient ships may result in a change in hull and main engine design. With a view to saving fuel, sail-assisted ships may be built to tap wind power. It is not impossible to conceive that advances in fuel cells may result in ships being propelled by the fuel cell/superconducting motor combination which may be by far a more fuel-efficient propulsion system than the existing main engine.

17.16 In the time-frame under consideration, ship size may not increase. At present, the largest ships in the world are around 500,000 dwt. It is technologically possible to build even larger ships but for commercial reasons these may not be built. There may, however, be major changes in the construction and design of ships as also in command and control systems. The degree of automation on ships would also increase considerably and the future ships would be highly automated. As a result, the crew complement of ships would decline substantially and some developed countries may operate ships with a complement of only seven persons; at present the crew complement on Indian ships is generally between 50 to 60 persons.

17.17 On a global scale, no major changes in cargo handling technology are envisaged in the time-frame under consideration. Containerisation of Indian liner cargoes would continue to increase in the years ahead and perhaps stabilise by 2000 AD. However, Indian ports would have to be upgraded to keep pace with the developments taking place the world over.

17.18 Development of nuclear-powered commercial ships can be ruled out even by the turn of the century on account of the inherent dangers of proliferation of fissionable nuclear materials. Possibilities of accidents and of consequent radioactive pollution may also deter various countries from granting permission to nuclear-powered commercial ships to call at their ports.

The Need to Restructure Maritime Training

17.19 On account of technological changes, the type of training being imparted to afloat personnel will require to undergo a radical change. In future, the duties of navigating and engineer officers at the watch-keeping level may require to be integrated and Indian ships may also be manned by polyvalent officers. These emerging changes would require reassessment of training needs and introduction of new courses for training polyvalent officers. Similarly, for training the crew, better methods would have to be evolved. From that angle, it is desirable to take necessary steps to commence restructuring of maritime training facilities, particularly, because development of training facilities and course material requires long lead times.

Future Requirement of Shipping Tonnage

17.20 The requirement of shipping tonnage has been worked out on the basis of projected trade flows as well as taking into account the projections for coastal movement. While working out the tonnage requirements, changes pertaining to cargo handling technology and port conditions, to the extent these can be visualised, have been taken into account. Also two different levels of market shares have been assumed. The two different scenarios for cargo flows and two different levels of market shares combine to generate four scenarios for tonnage requirement. The results of the four scenarios are summarised in Table 17.2 given below:

TABLE 17.2. PROJECTED TONNAGE REQUIREMENT
(FLEET IN MILLION DWT)

(Rs Crore)

Sl. No.	Particulars	High cargo flow high market share	High cargo flow low market share	Low cargo flow high market share	Low cargo flow low market share
1.	Fleet on April 1, 1987	9.7	9.7	9.7	9.7
2.	Existing tonnage to be scrapped between now and 2000 AD	7.1	7.1	7.1	7.1
3.	Fleet which would exist in 2000 AD (1-2)	2.6	2.6	2.6	2.6
4.	Additional tonnage required to be acquired	9.0	7.7	8.1	6.9
5.	Total tonnage required in 2000 AD (3+4)	11.6	10.3	10.7	9.5
6.	Investment required to be made in acquisition of additional fleet given in (4) above	8,100	7,200	7,500	6,700

17.21 For working out the additional fleet requirement, the following assumptions have been made:

(a) It has been assumed that the ships in the existing fleet will be scrapped on completion of their normal life.

(b) Ships remaining in the fleet have been taken cognizance of.

(c) It has been assumed that additional ships acquired between now and 2000 AD will be new ships and would not require to be replaced in the time-frame under consideration. It is, however, likely that the country may opt for second-hand ships whose balance life is shorter. In such an event, the figures of tonnage to be acquired may undergo a change.

17.22 A significant factor would be the shift in the composition of the Indian fleet. While there are no container ships in the Indian fleet at present, in the time-frame under consideration, the Indian fleet would have 72 container ships aggregating 1.4 million dwt (high cargo flow case). At the same time, the fleet of conventional break-bulk vessels would decline. The Indian fleet would also have more specialised ships like edible oil carriers, phosphoric acid carriers and ammonia carriers. But the fastest growth would be in the offshore sector. By 2000 AD, 33 per cent of the total Indian fleet in terms of number (under the highest case) would comprise offshore vessels

and structures.

17.23 The shipping industry would require around Rs. 7000 to 8000 crore at current prices between now and 2000 AD in order to finance tonnage acquisition to meet the projected needs. The level of investment is based on acquisition of new ships at prevailing prices and no escalation has been provided for inflation. Variations in the requirement of funds could also arise out of fluctuations in foreign exchange parity. This factor has also not been taken into account while working out the requirement of funds. Considering that shipping is not a high profit-making industry as well as the fact that even the profitability of the few profit-making units is marginal and may continue to be so over the next few years, it may not be possible for these units to generate adequate internal resources. Hence, the shipping industry would require to raise a significant portion of the above funds from external sources.

17.24 At present, the distribution of fleet between the public and the private sectors is in the ratio of about 65:35 and this could be expected to continue in future. However, the private sector would require to raise large sums of money and, over the time period under consideration, the share of the private sector in the national tonnage could vary between 30 and 40 per cent. A sensitivity analysis for requirement of funds by the public and the private sectors has been carried out on the basis of the following two assumptions:

(a) The share of the public and private sectors would be in the proportion 60:40.

(b) The share of the public and private sectors would be in the proportion 70:30

17.25 The requirement of funds by the two sectors under the above alternatives is given in Table 17.3 below:

TABLE 17.3. RESOURCE REQUIREMENTS FOR 2000 AD

(Rs Crore)

Sl. No.	Particulars	Public	Private	Total
1.	Equity and reserves	1,200 (1,400)	800 (600)	2,000
2.	Loans and deferred credits	3,600 (4,200)	2,400 (1,800)	6,000
3.	Total (i.e. equity and reserves + borrowed funds)	4,800 (5,600)	3,200 (2,400)	8,000

* Figures in parenthesis indicate requirement of funds on a 70:30 basis. Other figures are for requirement of funds on a 60:40 basis.

17.26 From the above table it would be seen that the public and the private sectors would be required to raise/generate Rs. 2,000 crore in the form of equity capital and reserves. But, given the profitability of shipping companies in both the sectors, it may not be possible for them to generate even a fraction of this amount in the form of reserves. Hence, both the private and the public sector units would face the problem of raising equity capital because unless the shipping industry raises equity, ,it may not be in a position to borrow.

17.27 The basic problem, therefore, lies in improving the profitability of shipping companies and unless this objective is achieved, the shipping industry may continue to face difficult and uncertain future. Partly the profitability of shipping companies would depend upon the international shipping environment and ultimately the demand and supply for shipping tonnage in the international market. Shipping companies will have to live with this uncertainty. However, the Government can adopt certain policies without placing too much burden on the exchequer which would help in improving the viability of shipping companies. These policy measures can be broadly divided into two categories:

(a) Measures which mitigate the existing burden.

(b) Measures which provide a positive thrust to the industry.

17.28 It is with this in view that certain suggestions are being made in the subsequent paragraphs which would have a long-term impact on

the functioning of the shipping industry. These suggestions are by no means comprehensive but cover some of the vital areas.

Measures to Mitigate the Existing Burden

(i) Review of Pari-Passu Obligation

17.29 Reference has been made above to the obligation imposed on the Indian Shipping Companies to acquire ships from Indian yards. Due to the higher prices paid, the interest and depreciation form a significant part of ship-operating cost thereby placing a heavy burden on the shipping industry because these ships have to compete in the international market and earn freight at the same rates as are prevailing in the market. The Government should examine the possibility of separately subsidising the Indian shipyards so that these do not prove a burden on the Indian Shipping industry.

(ii) Making Ship Repair Facilities Competitive

17.30 As a policy (unless a dispensation to the contrary is obtained), Indian ships are required to be repaired at Indian yards. For various reasons, the Indian yards quote much higher rates than the foreign yards and also take longer time to carry out repairs. As a result, the ship-owning company is required to absorb an additional burden. To remedy the situation, the ship repair yards in India should be encouraged to become competitive so that their cost structure does not place a burden on the shipping industry.

(iii) Reimbursement of Losses Incurred by the SCI on socio-political services

17.31 The SCI is required by the Government to operate passenger-cum-cargo services to the Andaman and Lakshadweep islands on socio-political considerations on which the SCI has no control in terms of either fixing freight rates or schedules. These services are not viable. According to the present formula, the SCI is required to absorb the entire loss on such services in case it makes an overall profit and 20 per cent of the loss in the years it incurs an overall loss (including loss on these services). This decision of the Government has created serious anomalies. At present, the losses are reported to be large (about Rs. 14 crore per annum). If the SCI continues to absorb such losses, it would not be able to build up reserves; and for further expansion, it would have to look to the public exchequer for providing funds in the form of equity capital. Hence, it is desirable that the Government reimburses the entire losses incurred on the operation of such services.

(iv) Tax Reliefs to the Shipping Industry

17.32 In several countries, profits from the shipping business are given special treatment in the form of complete exemption from income tax, special tax rates, accelerated or free depreciation and investment allowance. The Indian shipping industry should also be extended special treatment in respect of profits earned by it for enabling it to conserve reserves and cash.

17.33 In the past, the Indian shipping industry was granted liberal tax incentives. But recently the Government has introduced Section 115J in the Indian Income Tax Act. Section 115J provides that for computing income for tax purposes, previous years' losses, investment allowance and unabsorbed depreciation determined as per income tax assessment, cannot be set off. The implications of this Section are that shipping companies earning profits in a particular year would be required to pay income tax even though they may have large unabsorbed losses, unabsorbed investment allowance rebate or depreciation in previous years as per income tax assessment.

17.34 One of the special features of the shipping industry is its highly cyclical nature. In some years the shipping industry is able to earn high profits while in most others, its profits are marginal or it incurs losses. Hence, shipping companies inherently have to rely on a few good years to compensate for a number of marginal years. Considering the fact that the profitability of shipping industry is low, the provisions of Section 115J would erode the ability of even the few profit-making companies to generate funds for expansion and modernisation. In view of this, it

is essential that the scope of Section 115J be so modified as to exclude shipping companies from its ambit.

Measures to Provide Positive Thrusts

(i) Cargo Support

17.35 The Government of India should enact the requisite legislation to provide cargo support to Indian liner shipping. This legislation should also ensure that Indian shipping lines are not given price preference with regard to the export of liner cargo and that Indian lines provide a reasonable and adequate service so that exporters' interests are not adversely affected.

17.36 The Ministry of Surface Transport has formulated an Entitlement Voucher (EV) Scheme for shipment of India's liner exports. This scheme provides that any exporter shipping cargo by an Indian line will get a voucher entitling him to ship by a foreign shipping line cargo to the extent of 150 per cent of the freight value of the cargo shipped by the Indian shipping line. The EVs will be freely transferable from one shipper to another. In effect, the scheme is intended to ensure a 40 per cent share of total liner export cargo to Indian ships. A legislation to give effect to the EV scheme is under consideration of the Government. Such legislation will not only help improve capacity utilisation of Indian ships but go a long way in improving the viability of the Indian liner shipping companies.

(ii) Canalised Cargo for Indian Ships

17.37 If Indian shipping lines are able to obtain larger quantities of cargo canalised through Government departments/agencies, it would help the Indian shipping industry. This could be achieved by strictly following a policy of concluding contracts for purchase on "free on board" (f.o.b.) basis and sale on "cost plus insurance plus freight" (c.i.f.) basis. This position has been stressed in various meetings and in communications to the concerned Ministries at various levels. But despite these instructions, some of the purchasing/selling agencies continue to deviate from this policy. The policy laid down needs to be strictly adhered to.

(iii) Encouraging Shipping Companies to Diversify into Non-Shipping Activities

17.38 A policy should be adopted to permit shipping companies to diversify into non-shipping activities but, while doing so, care should be taken to ensure that there is no diversion of funds obtained on soft terms basis for shipping to non-shipping activities.

(iv) Encouraging Non-Shipping Companies to Enter Shipping Business

17.39 The erstwhile SDFC had followed a policy of granting soft loans to shipping companies only and non-shipping companies were not permitted to avail of such loans. As a result, this policy deterred non-shipping companies from entering the shipping business. However, a diversified company has more resilience to withstand the changes, particularly in a cyclical business like shipping. Hence, in future, the shipping division of a composite company should be treated as a separate unit at par with other shipping companies so that it becomes eligible for the same benefits as are allowed to other non-diversified shipping companies. Nevertheless, care should be taken to ensure that such companies do not end up as companies owning a very small fleet developed mainly to avail of tax and other benefits.

(v) Acquisition of Second-Hand Ships

17.40 Technological innovations in hull design, propulsion techniques, cargo handling and command and control systems will tend to accelerate the pace of obsolescence of the existing fleet. And, in the years ahead, such changes are likely to come about at a faster pace. In this situation, it may be desirable to lay due emphasis on the possibility of acquiring second-hand tonnage as not only would it be cheaper but these vessels could also be scrapped before obsolescence catches up with them. However, each individual

shipping line will have to devise its own investment strategy including an appropriate mix of new and second-hand ships, taking into account the profile of its fleet, its financial position commercial requirements and competitive pressures.

(vi) Capital Restructuring of Shipping Companies

17.41 The capital structure of Indian shipping companies is weak and needs to be strengthened. The viable private sector units should be encouraged to raise capital by giving positive incentives to investors in the form of tax rebates, etc.

17.42 The capital base of the public sector company namely, the SCI, also needs to be strengthened. The equity of the SCI at the end of June, 1987, was Rs. 70 crore and its total borrowings from external sources were Rs. 1,254 crore including Rs. 530 crore from the SDFC/Government. This pattern of financing has created a distortion in its capital structure and its equity: debt ratio at the end of June, 1987, was around 1:13. Such a lopsided capital structure would invariably adversely affect the company's ability to service debt and, ultimately, its ability to expand and modernise its operations in tune with the national requirements. The Government is considering a proposal to convert Rs. 270 crore of the Corporation's debt into equity and increase its equity capital to Rs. 340 crore to help SCI to reduce the present high debt equity ratio and raise resources both internally and externally.

(vii) Reduction in Manning Scales

17.43 The manning scales on Indian ships are high. These are progressively required to be reduced so that in 2000 AD manning on Indian ships approaches international levels. It may not be possible for an individual shipping line to attempt this on account of strong pressures by the unions. But the Government, acting through the Directorate General of Shipping, should initiate steps to reduce manning levels as quickly as possible, if necessary, through the mechanism of tripartite negotiation.

Conclusion

17.44 Over the last decade and a half, the fortunes of the shipping industry have undergone a sea change. Structural changes taking place in the patterns of world trade and industrialisation have resulted in stagnation in the global cargo flows. This, in turn, has led to a steep decline in the profitability of the shipping industry from 1975 onwards and its profitability now at best can be considered marginal. As such, the shipping industry, which was a high growth industry till the mid-seventies, has been stagnating for the last 13 years and incurring losses the world over. Yet many countries, including several developed countries and free market economies, support their shipping industry for strategic reasons through covert and overt subsidies which also include direct-operating subsidies.

17.45 The tonnage required by Indian shipping industry in the time-frame 2000 AD, under the most optimistic scenario, would be higher by 1.9 million dwt from 9.7 million dwt in April, 1987, to 11.6 million dwt in 2000 AD or by about 20 per cent of the fleet in 1987. Under the conservative scenario, the tonnage requirement in 2000 AD would be at about the 1987 level. However, the structure of the Indian fleet is likely to undergo a major change in 2000 AD the composition of the fleet would be substantially different due to modernisation and replacement programme.

17.46 The modernisation and replacement programme would require, without taking into account inflation and fluctuations in exchange parity, a massive investment of about Rs. 8,000 crore. In actual practice, the requirement of funds could be even more. But the current financial position of the industry is weak and, given its present level of profitability and cash flows, the major problem which the industry is likely to be besieged with, would be that of raising resources.

17.47 This is the crux of the problem facing the industry at present. Partly, the profitability of shipping companies depends upon the global demand and supply scenario, but it is also affected by Government policies. To that extent, there is a need to review existing policies which place a burden on this highly competitive international industry. At the same time, the Government

should adopt positive measures for the development of the shipping industry in the form of cargo support and liberal tax benefits which would *inter alia* facilitate raising of resources.

XVII CIVIL AVIATION

Introduction

The civil aviation transportation system in India is based on domestic services being provided by Indian Airlines (IA), with Vayudoot providing some short haul services. Air India (AI) operates international services while Indian Airlines operates to some neighbouring countries. In addition, foreign carriers also operate international flights connecting India directly with about 37 countries. The main function of Pawan Hans, formed in 1985, is to provide helicopter services to the oil industry.

18.2 The National Airports Authority (NAA) manages 86 airports and the civilian enclaves at 26 defence airports and provides the air traffic services throughout the country. The International Airports Authority of India (IAAI) operates the four major metropolitan airports, namely Bombay, Delhi, Calcutta and Madras. The regulatory and licensing functions, bilateral issues, approval of tariffs/schedules, etc., are entrusted to the Director General of Civil Aviation (DGCA).

18.3 The formation of Indian Airlines and Air India by nationalisation of private airlines, was done in August, 1953. Since then, the civil aviation industry has registered a tremendous growth, with substantial backing from public plan expenditures, as shown in Table 18.1.

TABLE 18.1. PUBLIC PLAN EXPENDITURES ON CIVIL AVIATION

Plan	Period	Amount (Rs Crore)	Aviation as percentage of Transport Sector
First	1951-56	23	5.3
Second	1956-61	49	4.5
Third	1961-66	49	2.5
Fourth	1969-74	177	7.0
Fifth	1974-79	294	5.2
Sixth	1980-85	931	6.6
Seventh	1985-90	758* (Outlay)	3.3

Source: Five Year Plan documents.

18.4 The first priority in developing the industry was accorded to fleet upgradation of the airlines. As a result IA now has a predominantly jet fleet and AI an all - jet fleet. Improvement of the four major airports and airline support facilities were accorded second priority. The improvements to the other airports and the navigation and communication facilities were accorded a lower priority.

18.5 For the Seventh Five Year Plan the objectives stipulated for the industry were to reduce the demand for budgetary support and control the pressure on foreign exchange reserves. The strategies spelt out were to restrain average growth of domestic passenger traffic to about 8 per cent per year, rationalise air services (including integration of IA and Vayudoot services) and achievement of reasonable load levels. Other measures recommended were to reduce fuel consumption, make the fare structure cost oriented, plan airline services as part of total tourist package, upgrade training facilities and develop helicopter services to reduce dependence on leased helicopters.

Trends in Traffic Growth

Domestic Traffic

18.6 Indian Airlines utilises over 80 per cent of its capacity to carry passengers. Table 18.2 shows the trend in total capacity offered in Available Tonne Kilometers (ATKms), and the capacity utilised in Revenue Tonne Kilometers (RTKms), over the years.

TABLE 18.2. CAPACITY CREATION AND UTILISATION, INDIAN AIRLINES
(SYSTEMWISE TRAFFIC, IN MILLIONS)

Year	Capacity created (ATKms)	Capacity utilised (RTKms)	Load factor%	Passenger share of RTKms %	Number of passengers
1970-71	208.2	161.5	77.6	84.8	2.05
1975-76	352.8	248.9	70.5	85.9	3.24
1980-81	663.9	420.2	63.3	83.2	5.08
1985-86	1,037.8	720.0	69.4	82.3	9.13

Source: Working Group I of Planning Group on Civil Aviation (PGCA) and Indian Airlines, *Annual Report 1985-86.*

18.7 In the same time the number of embarking passengers on IA grew at an average rate of 10.9 per cent per year. In the first half of the 1980's, IA's capacity increased at 9.3 per cent per year, while utilisation grew at 11.4 per cent per year. Its Systemwise load factors have also been quite high. IA has, however, experienced capacity constraints on many of its trunk routes round the year and on its tourist routes in season. There is no way of assessing the total quantum of unsatisfied demand. The passengers carried and the RTKms performed by Vayudoot in 1985-86 accounted for about 0.25 per cent of the total traffic. Vayudoot's load factor was 61.6 per cent.

18.8 Domestic cargo, between 1970-71 and 1985-86, grew at an average annual growth rate of 14.1 per cent. The spurt in growth took place after the Airbus A300B was introduced in 1975-76. The ten years thereafter saw an average annual growth rate of about 17.1 per cent.

18.9 The average annual growth rate of international passenger traffic from/to Indian on all carriers in the period 1974 to 1984 was about 16 per cent. During the period, Air India achieved an average growth rate of 13.2 per cent for passenger traffic and 12.4 per cent for total RTKms. AI's capacity, in ATKms increased at an average rate of 11.3 per cent. At present, it uplifts about 30 per cent of the originating traffic, partly because of a decline in Middle East/Gulf traffic. In 1984-85, AI's Systemwise capacity was 1964.167 million ATKms and the utilisation was 1241.265 million RTKms, i.e. a load factor of 63.2 per cent. Of the total RTKms performed, the share of cargo has historically been about one-third.

Traffic at Airports

18.10 The traffic at the airports grew substantially in conjunction with airline traffic. The total passenger traffic at the four international airports rose from 6.79 million passengers in 1975-76 to 17.06 million passengers in 1985-86, at an average growth rate of 9.6 per cent annually. Presently, these airports handle about 95 per cent of the total international passenger traffic and 65 per cent of the domestic traffic in the country. The total cargo handled at the major airports was about 3.3 lakh tonnes in 1985-86, 3.23 times the cargo handled in 1975-76.

FINANCIAL PERFORMANCE

Indian Airlines

18.11 IA's operations have been profitable during the last 10 years except in 1979-81. Since 1981, IA has levied a fuel surcharge, which allows it to recover increases in working expenses due to fuel price rises. Since 1983-84, IA's interest liability has been low as it has not inducted new aircraft, and its turboprop fleet is fully depreciated. IA's financial performance is summarised in Table 18.3 which shows that its internal resources have been steadily increasing.

TABLE 18.3. SUMMARY FINANCIAL PERFORMANCE OF INDIAN AIRLINES

(Rs Crore)

Year	Revenue	Expense	Net Profit/ (Loss)	Internal Res. ·s
1975-76	111.18	103.39	7.79	19.88
1980-81	295.11	292.63	2.38	23.97
1981-82	386.53	375.00	11.33	49.07
1982-83	457.44	439.32	17.92	68.48
1983-84	540.93	495.08	45.85	105.59
1984-85	621.56	568.22	52.84	123.49
1985-86	723.81	660.29	63.22	132.39

Source: IA's *Annual Report 1985-86.*

18.12 The foreign exchange earnings of IA has been unsatisfactory, as shown in Table 18.4. The gap is expected to grow unless corrective steps can be implemented.

18.13 AI's operations have been profitable, as shown in Table 18.5, except for the period 1979-81.

TABLE 18.4. FOREIGN EXCHANGE PERFORMANCE OF INDIAN AIRLINES

(Rs Crore)

Year	Foreign Exchange		
	Earnings	Expenses excl. fuel	Net/(loss) excl. fuel expenses
1975-76	23.42	21.11	2.11
1980-81	75.48	92.11	(16.63)
1981-82	104.49	124.66	(20.17)
1982-83	119.58	124.99	(5.33)
1983-84	137.03	138.30	(1.27)
1984-85	147.83	171.12	(23.29)
1985-86	163.14	232.00	(68.86)

Source: PGCA's Working Group IV, Table 30, and Planning Commission.

TABLE 18.5. SUMMARY FINANCIAL PERFORMANCE OF AIR INDIA

(Rs Crore)

Year	Revenue	Expenses	Net profit/ (Loss)	Internal Resources
1975-76	201.61	195.26	6.35	18.77
1980-81	514.93	536.23	(21.30)	5.28
1981-82	621.64	611.28	10.36	42.38
1982-83	719.93	681.89	38.04	77.49
1983-84	792.36	734.97	57.39	106.99
1984-85	854.31	809.62	44.69	99.03
1985-86	893.88	827.88	66.00	119.21

Source: PGCA's Working Group IV, Table 13 and 16, and Air India's *Annual Report, 1985-86*.

18.14 Table 18.6 shows the foreign exchange position of AI. If adjustments are made for the collections made in India by AI on account of international travel and the expenditure on fuel uplifted from India the position deteriorates.

TABLE 18.6. FOREIGN EXCHANGE PERFORMANCE OF AIR INDIA

(Rs Crore)

Year	Earned/Saved	Expenses excl. fuel	Net gain
1975-76	153.14	121.97	31.17
1980-81	400.86	363.63	37.23
1981-82	498.68	387.22	111.46
1982-83	567.78	415.03	152.75
1983-84	626.44	446.10	180.34
1984-85	-	-	177.15
1985-86	657.60	504.02	153.38

Source: PGCA's Working Group IV, Table 30

Vayudoot

18.15 Vayudoot's financial performance, shown in Table 18.7, is unsatisfactory. This is despite the fact that (a) a part of their fleet which they took over from IA is fully depreciated; (b) the figures do not reflect the indirect subsidies Vayudoot receives e.g. concessional landing and parking charges, exemption from sales tax on aviation fuel in certain States, etc. Since the induction of Do-228 in 1985-86, Vayudoot has incurred ever increasing losses. The foreign exchange position has not been calculated.

TABLE 18.7. SUMMARY FINANCIAL PERFORMANCE, VAYUDOOT

(Rs Crore)

Year	Revenue	Expenditure	Profit/(Loss)
1981-82 (16 months)	0.18	0.84	(0.66)
1982-83	2.02	3.11	(1.09)
1983-84	3.09	3.05	0.04
1984-85	5.00	4.88	0.12
1985-86	8.23	9.01	(0.78)

Note: Auditors' report for 1983-84 indicates profits exclude landing and route navigation bill of Rs 20.63 lakh and lease bills of IA amounting to Rs 57.83 lakh. Taking both these items the net loss was Rs 74.74 lakh.

Pawan Hans

18.16 The financial performance figures for Pawan Hans are not available, but as yet it is not

a commercially viable unit.

International Airports Authority of India

18.17 The financial performance of IAAI has been good, as shown in Table 18.8. Since 1986-87, it has not taken any budgetary support from the Central Exchequer.

TABLE 18.8. FINANCIAL PERFORMANCE OF IAAI

(Rs Crore)

Year	Total Revenue	Total Expenses	Net Profit	Internal Resources
1975-76	11.56	7.46	1.63	2.63
1980-81	41.78	26.95	6.87	11.46
1981-82	54.72	33.38	10.66	13.96
1982-83	70.24	42.92	12.47	15.35
1983-84	79.07	40.54	15.85	17.57
1984-85	95.10	49.61	20.49	22.59
1985-86	113.09	70.84	22.10	30.67
1986-87	147.49	91.68	33.31	34.08

Source: IAAI *Annual Report, 1986-87.*

National Airports Authority

18.18 Table 18.9 shows the total revenues of the DGCA, before the formation of NAA in 1986. Details of expenditure are not available. It is understood, however, that the revenue was barely adequate to meet expenditures and no surplus was available for servicing capital, depreciation, etc. It can be inferred that on taking these into account the general exchequer subsidised the DGCA. The situation has not changed since NAA was formed. Landing and route navigation charges accounted for about 92 per cent of the total revenues on the average.

TABLE 18.9. REVENUES OF DGCA

(Rs Crore)

Year	
1980-81	26.61
1981-82	28.65
1982-83	34.53
1983-84	37.66
1984-85	53.95 #
1985-86	51.11

Includes Rs 4.85 crore as arrears for past years.
Source: National Airports Authority

Traffic Forecasts

Domestic Traffic

18.19 The forecast for total annual domestic passenger traffic for Indian Airlines is shown in Table 18.10.

TABLE 18.10. DOMESTIC PASSENGER TRAFFIC FORECAST, IA

(million)

Year	Number of Passengers	Revenue Passenger Kilometres
1985-86(actual)	9.130	7,336
1990-91	15.803	12,643
1995-96	24.423	19,540
2000-01	46.935	37,548

Source: PGCA, 1986 Chapter II.

18.20 The average annual growth rate for the number of passengers and for the Revenue Passenger Kilometers for the 15-year period 1985-86 to 2000-01 is projected at 11.5 per cent. Traffic forecasts have not been prepared for domestic passengers travelling on Air India's domestic sectors. The projected growth rates will, however, depend on the priorities to be assigned to various sectors as discussed in paragraph 18.39 below.

18.21 The tonnage of domestic cargo, is assessed to grow at the rate of 18.2 per cent annually, as shown in Table 18.11.

TABLE 18.11. DOMESTIC CARGO FORECAST

Year	Tonnage
1985-86(actual)	111,215
1990-91	189,098
1995-96	289,139
2000-01	546,682

Source: PGCA, 1986. Chapter II.

18.22 There are no forecasts available for traffic expected on Vayudoot, Pawan Hans and possible air taxi operations.

International Traffic

18.23 Two forecasts for total international passenger traffic have been prepared. The "normal" forecast, at an average annual growth rate of 6 per cent for international traffic assumes the continuation of the present trend of roughly 40

per cent of the incoming traffic being tourists. The "high" forecast of 8 per cent average annual growth rate for the total traffic assumes a tourist traffic growth of 10 per cent per year and the tourists share of the total traffic at about 50 per cent by 2000 AD. The forecast figures are shown in Table 18.12.

TABLE 18.12. FORECAST OF TOTAL INTERNATIONAL PASSENGER TRAFFIC

(million)

Year	Number of Passengers	
	Normal growth rate @ 6 per cent	High growth rate @ 8 per cent
1986 (base year)	4.509	4.509
1990	5.867	6.343
1995	7.876	9.282
2000	10.576	13.268

Source: PGCA, 1986. Chapter II.

18.24 The annual growth rate forecast for Air India, corresponding to the low, (i.e. 6 per cent) rate of growth is 6.9 per cent. This assumes that Air India will be able to increase its market share ex-India from 30 per cent to about 40 per cent. Therefore by 2000 AD, Air India would be required to carry 4.23 million passengers to and from India only. In absolute numbers the passenger traffic to the Middle East will be the highest, Europe second and South-East Asia third. These regions will account for about 85 per cent of the total number of all passengers, similar to the situation prevailing in recent years. In relative terms the proportion of traffic to South East Asia will increase while that for the Middle East traffic will be reduced. The proportion of passengers to other regions will not change much.

18.25 The forecast growth rate of the total international cargo traffic is 10 per cent per year. It is estimated that Air India should be in a position to achieve a growth rate of 12 per cent per year, 9 per cent on passenger aircraft and 16 per cent on all-cargo aircraft.

Fleet Requirements

18.26 Based on the traffic projections, the fleet requirements are projected as given in the following Tables. Table 18.13 shows the fleet size of IA.

TABLE 18.13. PROJECTED FLEET SIZE OF INDIAN AIRLINES

Year end	A300	A320	B737	T'prop
1985-86 (actual)	10	-	25	15
1990-91	10	36	20	15
	300+seats	150+seats	100+seats	
1994-95	20	42	42	
2000-01	38	80	75	

Source: PGCA, 1986. Chapter II.

18.27 Currently, IA also operates some B737's and A300B on lease. The numbers of leased aircraft varies from time to time. IA has ordered 19 A320's for delivery in 1989-90 with options on another 12. In the period beyond 1995-96, IA is likely to have 4 or 5 types of aircraft in service.

18.28 Vayudoot's fleet requirement is shown in Table 18.14.

TABLE 18.14. PROJECTED FLEET SIZE OF VAYUDOOT

Yearend	Do228	T'prop	New T'prop
1985-86 (actual)	10	4	-
1990-91	11	-	12
	20+seats	-	40+seats
1995-96	18	-	20
2000-01	29	-	33

Source: PGCA, 1986. Chapter II.

18.29 Air India's fleet requirement is indicated in Table 18.15. It will require 45 aircraft including replacements of 10 existing aircraft. Currently, AI leases freighter aircraft. It will require two B747-300's Combi's in the near future.

TABLE 18.15. PROJECTED FLEET SIZE OF AIR INDIA

Yearend	B747	A300	A310	New	B747F	A310C
1985-86 (actual)	10	3	5			
	400+seats	300+seats	200+seats	240/280seats		
1990-91	11	3	12	-		
1995-96	11	-	12	9	3	-
2000-01	16	-	12	12	5	3

Source: PGCA, 1986. Chapter II, para 5.1.

Investment Projections

18.30 The investment requirement of the civil aviation sector till 2000 AD is given in Table 18.16.

TABLE 18.16. CIVIL AVIATION INVESTMENT REQUIREMENTS TILL 2000 A.D.

(Rs Crore, at 1985-86 prices)

Air India	6,073.00
Indian Airlines	8,998.00
Vayudoot	341.50
Automation	1,229.50
Infrastructure	1,518.46
Land for second airport at Bombay	1,500.00
Total	19,660.46

Notes: (a) Investment indicated for the airlines is only for the fleet acquisition.
(b) Requirements of Pawan Hans and the air taxi operations are not included.
(c) Infrastructure includes airport development only up to 1994-95.
Source: PGCA, 1986. Chapter IX.

Issues in Civil Aviation

18.31 The ability of the civil aviation industry to generate sufficient internal resources to finance its capital investment is critical. Roughly 75 to 85 per cent of this would be required in foreign exchange. Budgetary support will be required for some undertakings. A comprehensive strategy has to be planned for improving the profitability of all the agencies; increase foreign exchange earnings; rationalise the demand for air travel; and upgrade infrastructure to permit the full utilisation of aircraft capacity.

Indian Airlines

18.32 The first step to develop domestic services is to identify the priority markets. It is recommended that the priority market should be the service provided for business traffic on long distance flights. The development of services for vacation travellers is important but should be accorded a lower priority. The passenger profile surveys done by IA in 1986 showed that business traffic constituted about 70 per cent of IA's total traffic, while vacationers accounted for about 17 per cent. The shares vary seasonally. Secondly, over 80 per cent of the passengers were resident Indians, about 9.5 per cent foreign tourists and 8.5 per cent non-resident Indians who purchased their tickets in foreign exchange. Of the resident Indian passengers, between 75 and 80 per cent travel for business purposes.

18.33 It is recommended that system-wise domestic passenger profile studies be conducted regularly. Information regarding origins/destinations and market segments, the linkages between the short haul services and the trunk routes, and patterns of travel based on whether residency is in India or abroad is especially important.

18.34 The second factor involved in establishing priorities is the length of sectors on which services are operated. Historically, the traffic on IA has been concentrated on a few routes. During 1984-85, IA operated services on 195 city-pair sectors between 64 cities, but 58 per cent of the passengers carried and 68 per cent of the revenue passenger kilometers performed were concentrated on 21 city-pairs. The share of passengers is highest on the sectors with inter-city distances, exceeding 800 kms. This shows that the benefits of air travel are appreciated more for the long distance sectors where it provides a distinct advantage over surface transport, especially with regard to savings in time.

18.35 About 66 per cent of IA's services are on short haul sectors, where unit costs are higher than on long haul. A large number of the short haul routes are unprofitable, as shown in Table 18.17. Even services with high load factors do not meet total operating costs.

TABLE 18.17. SUMMARY STATEMENT ON ROUTE PROFITABILITY, IA, 1984-85
(Surplus/Deficit in Rs Crore)

Year	Services meeting TOC		Services not meeting TOC			
	Total No of services	Surplus/ deficit	No's	Surplus	No's	Deficit
1970-71	103	-8.98	15	22.70	88	11.68
1975-76	93	+2.38	25	16.86	68	14.46
1980-81	113	-13.49	26	21.43	91	34.93
1984-85	139	+20.49	46	72.10	93	51.61

TOC: Total Operating Cost.
Source: PGCAs' Working Group I, Table 2.13, p. 72.

18.36 An analysis of the services of 1984-85 showed that 46 of them did not meet their total operating costs. Of these, only 12 were operated on account of geographical constraints hindering surface transport.

18.37 As a corollary to the profitability of sectors, the continued utilization of the B737's and turboprop fleet on short haul routes has resulted in the fleet being unprofitable. Only the Airbus A300B fleet, operating on the long haul sectors, is profitable. Even though new long-haul B737 services have been introduced in recent years the advantage gained is offset by an increase in the numbers of short-haul flights.

18.38 Given the low contribution of the IA's turboprop fleet to capacity and the drain they impose on revenues, the aircraft should be phased out. A route network which utilises the full capabilities of the Airbus A300, the B-737 and the A-320 fleet should be developed.

18.39 The Planning Group on Civil Aviation (PGCA) has assessed that air services for distances less than 300 kms are likely to be uneconomical as compared to surface modes. To restructure the route network it is recommended that studies be undertaken jointly with regional planning bodies and surface transportation departments to identify short haul corridors where good surface transportation connections can be introduced as an alternative to air services. The move will require unstinted political and administrative support. A pruning of the uneconomic services was once done in the early 1970's, and there is no reason that it cannot be repeated with the backing of appropriate agencies.

18.40 The tariff structures of the domestic carriers are not cost related. The telescopic gradient of fares per seat kilometre between short and long haul sectors are low compared with Europe, where the gradient ranges upto 60 per cent. A steeper gradient, which reflects higher costs on short haul, will be desirable. A study is required to develop a rational cost based fare structure.

Vayudoot

18.41 Vayudoot was incorporated as a jointly owned company of Indian Airlines and Air India. The original objective was to provide low cost connections to the inaccessible areas in the North East region. However, overtime short haul air services have been introduced in other parts of the country. Vayudoot's expansion indeed has been very rapid. Currently, it operates services to 97 stations and plans to expand it to 130 by the end of the Seventh Plan period, subject to the availability of aircraft capacity and airport and infrastructural facilities.

18.42 Socio-political pressures rather than commercial prospects could turn out to be the dominant factor in Vayudoot's expansion. PGCA recommended that uneconomic services, provided for social or other reasons, must be identified and cost to the national economy worked out. The economic viability of short haul operations must take into account costs of reactivating or setting up infrastructure of airports, etc. These were relatively high for Vayudoot services and were spread over infrequent operations. The airports require sophisticated expensive equipment which are poorly utilized.

18.43 It is suggested that Vayudoot consider coordinating its operations with those of Indian Airlines so that Vayudoot acts as a supplemental carrier on short tourist routes on which IA is short

of capacity. With the introduction of larger aircraft by both IA and Vayudoot, a policy will be required regarding the allocation of routes.

Pawan Hans

18.44 Pawan Hans was formed in 1985 with 51 per cent equity participation of the Government of India and 49 per cent of ONGC. Its primary goal is to reduce the foreign chartering of helicopters for use by the oil industry. It presently has a fleet of 41 helicopters. A few of the helicopters are leased out for civilian use. They provide services in regions where road transportation is extremely difficult and time consuming.

18.45 Due to the very high cost of operations of the helicopters, their utilisation for regular short haul air services must be avoided where alternate means of transport, either by road or by fixed wing aircraft, is possible. The helicopters are suitable for special uses e.g. to the oil industry; electrification projects, air ambulance and emergency services, etc. Considerable attention is required to be paid to the creation of capacity, and its utilisation, by coordinating the growth of Pawan Hans with the growth of its special markets.

18.46 Pawan Hans is entirely dependent on the defence services for its requirements of pilots, engineers and technicians. There is an immediate need for training the entire technical staff of Pawan Hans by setting up a helicopter training institute or organising special courses at the Indira Gandhi Rashtriya Uran Akademi.

18.47 Coordination is also required in developing infrastructural requirements, especially in areas where no navigational aids are available. The construction of helipads requires comparatively small resources of land, expense and time as against providing facilities for fixed wing aircraft, but the provision of radio aids at remote, all-weather stations is an important factor. Both of these infrastructural needs will have to be met by the National Airports Authority in consultation with Pawan Hans.

Air Taxi Policy

18.48 The Government announced an air taxi policy in 1985 to allow resident and non-resident Indians to start air taxi services within India. However, no air taxi company has been registered in the country as yet. PGCA has recommended that the air taxis would support tourist movement and that the aircraft to be used as air taxis ought to have a maximum capacity of 10 seats.

18.49 Some of the policy related issues which require examination are: (a) identification of the markets and tourist centres to be served; (b) the investments required for acquiring equipment, manpower and airport facilities; (c) whether 10-seater aircraft are the most economic and relevant to the market needs; (d) the extent to which funds will be diverted from the development of existing services and facilities; and (e) the impact on foreign exchange flows.

International Air Services

18.50 Air India, by international standards, is a small airline. It cannot compete with major airlines with larger fleets and extensive networks of destinations. AI must build up its niche in the market by distinguishing itself as a high quality airline. It should concentrate on the routes to the Middle East and South East Asia as the main markets to provide it with sustained profitability.

18.51 Considering the net profitability of the last ten years, AI has been consistently and substantially profitable only on its services to the Middle East. On the sectors to Europe, USA, South East and Far East Asia, Australia, etc., the airline lost money. The cargo services were profitable.

18.52 AI's fleet planning and aircraft selection should be undertaken with more rigorous operational and financial analysis than has been done in the recent past. The induction of additional capacity will reduce the average age of the fleet permitting it to operate non-stop services to many destinations as do the competing airlines operating from India.

International Cargo

18.53 International air cargo consists of high-value, low-volume items. Even though in terms of tonnage it formed a minimal portion of the total trade, in 1985-86 it accounted for nearly 30 per

cent by value, of India's total exports and about 13 per cent of the imports. The handling of air cargo is constrained by: (a) cumbersome procedures and methods of clearance and ground handling; (b) imbalance of trade; and (c) insufficient export cargo uplift capability of the airlines. The tonnage of air cargo to be handled is expected to rise nearly four-fold by 2000 AD. The opportunity of reaping substantial benefits exists by speeding up all aspects of cargo handling.

18.54 In recent years, AI's share of revenue from freight has steadily declined from 21 per cent in 1975-76 to about 16 per cent in 1983-84. AI's all-cargo services are operated with aircraft taken on lease. Since nearly 90 per cent of the total tonnage of cargo carried by AI originates/terminates in India the acquisition of two B747-Combi aircraft by AI will increase its cargo carrying capability, but it will be insufficient to capture a significantly larger share of the market.

18.55 Air India can gain appreciably by improving its cargo handling capability. Improvement of the quality of ground handling is required to reduce the total transportation time of cargo. Introduction of the "one-window" concept for clearing paperwork; "round-the-clock" acceptance and checking of cargo at major airports; better consignment tracking and retrieval systems; quicker uplift of the export and import cargo; faster security checks of export cargo; provision of consolidation facilities and training of staff would reduce the throughput time.

18.56 Development of some airports as hubs for handling international transhipment cargo should be examined. Handling services provided at such airports would result in a remunerative service. A uniform practice of allowing transhipment of international import cargo, in bond, by IA from the gateway airports to final destinations at inland airports needs to be evolved in consultation with the Customs Department.

18.57 It may be studied if professionalisation of ground handling can be achieved through a specialised company owned by the airport authorities, to develop and operate air cargo terminals and provide ground handling services.

New Technology and Automation

18.58 Civil aviation can effectively utilise new technology, automation and computerisation to increase productivity and improve the quality of service and level of safety. The areas to which priority should be accorded for increasing or introducing automation are given below:

a) It is important to organise maintenance of an industry wide data base for planning. A system study to develop a data base structure should be commenced at the earliest.

b) The aircraft of the future should have engines with higher energy efficiency; be quieter in operations; have better field performance; provide payload capacity; use new materials that reduce maintenance needs and be equipped with sophisticated avionics.

c) For domestic services the aircraft offering more fuel efficiency may have greater relevance than those with higher cruise speeds.

d) A high priority should be given to upgrading the airlines reservations system and including Vayudoot in the network, and providing access and booking capability to the travel agents.

e) The airlines should also automate their operations and scheduling plans, and the aircraft maintenance records.

f) In the case of the airports, improvements in throughput capability and quality of service is necessary. Improving productivity, using new technology should be the preferred strategy compared to construction of new facilities. The specific areas for improvement are the passenger and baggage check-in system e.g. using Common User Terminal Equipment (CUTE); computerised passport and immigration control; cargo and baggage documentation and tracking, and automated flight information systems.

g) High priority must be given to installation of modern communication and navigational aids such as air traffic control and radar network; automatic message switching; voice and data communication links; use of satellite service and International Maritime Satellite (INMARSAT) as it is extended to the aviation sector; weather reports, etc.

h) As the pressure of traffic demand increases, substantive capacity growth concurrent with minimum acquisition of aircraft points to the need for simulator based training. Use of training

simulators for maintenance personnel and Air Traffic Control (ATC) should be examined. The simulators could provide training to personnel from adjoining countries. And possibility of regional cooperation with South Asian Association for Regional Cooperation (SAARC) countries be examined.

18.59 Aviation is an energy intensive mode. In the case of IA the cost of fuel and oil have averaged 44.2 per cent of IA's annual operating expenses since 1980-81. A substantial part of this cost is in foreign exchange. It is recommended that planning in all sectors of civil aviation should be aimed at reducing the energy costs of the airlines. These include utilization of aircraft on long-haul sectors rather than short sectors; selection of fuel efficient aircraft and engine combinations; introduction of flight management procedures; straightening of air routes where feasible; adopting an aircraft replacement policy which reflect these costs in calculating an optimum age of the aircraft fleet; introduction of simulator based training procedures so that aircraft can be utilised for productive operations; and maintaining high aircraft utilization and load factors.

18.60 In view of the fast and varied developments in the introduction of new technology, the industry should constitute a working group to develop a technology data bank and evaluate automation needs. The group can keep Indian manufacturers informed of priority areas for indigenisation. The possibility of involving Indian firms as sub-contractors to the large airframe, engine and ancillary manufacturers should be examined with a view to expand India's involvement in world aviation by developing indigenous technical competence.

18.61 The developments in hi-tech applications that are on the boards or undergoing testing hold promise of startling advances for aviation in the 21st century. Some of these are, airline operational and scheduling problems; computerised navigational control systems that permit simultaneous tracking of all aircraft movements over all of Indian airspace; onboard navigational systems; composite materials which eliminate corrosion and reduce airframe and engine weight; engines fueled by hydrogen; highly fuel efficient engines using crescent fans for high subsonic speed aircraft and commercial aircraft which operate at supersonic speeds.

Infrastructural Development

18.62 The development of airports, navigation and communication facilities has not been commensurate with the growth of air traffic and the introduction of new aircraft by the airlines. Many reasons can be assigned for this situation but the crux of the matter is the lack of timely and coordinated planning between the airlines and the airport authorities.

18.63 The gestation period for airport development has been insufficient as rapid demands are made for new or upgraded facilities to handle air services. While flights can easily be suspended if the traffic potential on a route is not upto expectation, the infrastructural facilities could result in wasted resources if they remain unutilised.

18.64 The lack of prioritisation of infrastructure development has resulted in the limited resources being dissipated amongst a large number of works or being directed towards projects which are not justified by economic analyses. Airports require large tracts of land and heavy capital investment and, except for a very few airports, they operate at a loss. Their operating costs are high and low frequency of aircraft operations result in poor revenue returns. Therefore, a method of efficient and equitable allocation of resources is required to be developed.

18.65 The development of navigational and communication infrastructure throughout the Indian controlled airspace should be accorded a high priority to match capacity and safety levels required by growing traffic. These ought to be economically justified.

18.66 One of the most important issues of infrastructural development, from financial and policy considerations, is the provision of a second airport to serve Bombay. The traffic at the present airport is nearly 9 million passengers annually and will double by the mid-1990's. With the continuance of the present pattern of operations the airport will soon be saturated despite the maximum expansion of its facilities. Thus, there is a need to plan short term action to enhance its capacity keeping the long term imperatives in

mind.

18.67 The short term plan for Bombay requires:

a) Measures to maximise the annual throughput of the airport.

b) Control of peak demand by limiting the number of operating slots. The allocation of slots can be implemented through different methods e.g. through mutual accommodation between airlines, offer of incentives such as differential landing charges for peak and non-peak hours, auctioning of operating slots and if all else fails, by regulatory action.

c) Encouraging airlines to operate point to point services which by-pass Bombay to reduce the use of Bombay as a transfer or transit airport. This policy may require upgrading and opening up selected domestic airports.

18.68 A matter of concern is the peaking of traffic at the large airports. At Bombay and Delhi nearly 50 per cent of the traffic is handled in six hours of the morning. In the case of domestic flights, nearly 35 per cent of the total daily passengers are handled in an hour and a half. The unbalanced utilisation of facilities adversely affects the quality of handling and maintenance services. Effective intervention, at the level of the Ministry, is called for to correct this state of affairs.

Institutional Development for Planning

18.69 The PGCA has recommended that the planning departments in all organisations ought to be strengthened, since at present, these are extremely deficient or non-existent. Concurrently, there is scope for a greater degree of coordination and cooperation between the organisations requiring knowledge of the systems being integrated. This suggests efficient central direction which should be undertaken by the creation of a special planning cell under the charge of a Technical Advisor, Planning in the Ministry of Civil Aviation.

18.70 A review of planning practices in aviation highlights the following areas to be strengthened:

a) The economic and physical data bases used for planning do not have a common data base framework which is useable by all the organisations in the sector.

b) Each organisation normally undertakes its planning exercises independent of detailed input from other organisations at the project formulation and preparation stage. By the time other organisations are involved, it is sometimes too late to incorporate any significant changes required by the users.

c) Most of the infrastructure planning is capacity related. Planning techniques make limited use of economic and cost-benefit analysis. It is at the project stage that a review of the financial viability is done, rather than examining economic viability at a national or regional level.

d) Costs of serving passengers and cargo are not indicated in any of the industry reports.

18.71 The joint studies that may be undertaken are many. Some examples are: identify the extent of resources each organisation expects to generate, in rupee and foreign exchange terms, to finance its growth; calculate fund availability to cross-subsidize the growth of other organisations; identify airports crucial to the national interest by classifying routes and services indispensable to the national transport system, and those that are operated for reasons of welfare and social service even if not commercially viable; correlate airport and airline traffic forecasts; coordinate aviation planning exercises with other transportation services; study and identify the airport and air traffic network capacities which require enhancement with related investment needs, etc.

18.72 The Ministry should develop a National Aviation Plan which will identify the long-term economic role of aviation, the growth of traffic and provision of services and infrastructure on different category of routes, development of each airport and the hinterland it will serve. With regular and systematic updating the Plan should be the core document to channel the flow of investments in the civil aviation sector.

Manpower Development

18.73 Civil Aviation is dependent upon manpower with skills in many diverse fields to manage, operate, coordinate and maintain the complex network of services provided by a variety of organisations using capital intensive high technology equipment. At present, the organisations have a high manpower figure relative to the quantum of services provided by them. The major reasons for the situation are low productivity norms, overstaffing, undertaking

certain services in house which may be done by contract, insufficient automation and insufficient training.

18.74 Supplementing the functioning of the aviation organisations are the regulatory agencies at the airports e.g. Customs, Immigration and Security control. In their case, beside the reasons already mentioned the regulations to be implemented and the practices followed also necessitate large manpower strengths. There is scope for improvement in the working of all the organisations.

18.75 A review of manpower studies shows, for example, that in both the airlines the flight crew, cabin crew, aircraft engineers and technicians, etc., can be reduced. To match the strengths of other international carriers AI can nearly halve the manpower requirements for its B-747 fleet, while IA can reduce its strength by 30 per cent.

18.76 In the case of the other organisations and agencies, norms for manpower productivity and costing have to be developed and training courses prepared for all levels of managerial, supervisory and technical staff. Institutes which can implement such programmes and impart training to non-technical staff, should be expanded.

18.77 The manpower development programme ultimately leads to the need to:

a) review the training syllabi for technical staff, ATC controllers, and operating and maintenance personnel of communication and navigational equipment,

b) upgrade the courses at the existing training institutes, namely, the Civil Aviation Training Centre and the Indira Gandhi Rashtriya Uran Akademi,

c) identify the change required in certification procedures for technical personnel,

d) identify functions which can be contracted to outside agencies, and

e) encourage technical and engineering institutes to include in their syllabi specialised courses related to aviation technology, and if sufficient volume of trainees are identified, start special courses.

18.78 The changes in technology will be faster than in the past. The past trends of relationship of manpower to new technologies cannot be projected to indicate future relationships and requirements. Therefore, an industry study group should be constituted to examine the impact of new technology on manpower development. The present situation of overprovision of staff has to be seen as an opportunity where training and career planning can be the most cost effective way of utilizing them. In a growing industry there need be no fear of retrenchment.

Regulatory Practices

18.79 The demand for air services has outgrown the capacity generated and considerable congestion is experienced on many routes. The present rates and fares charged by domestic airlines do not always reflect the costs of services. It is suggested, therefore, to adjust the rates to encourage optimum resource allocation between civil aviation and other transport modes.

18.80 An assessment of the routes which are commercially non-viable in the revised regulatory regime, but have to be operated as a social service, should be made. It is recommended that the quantum of losses for these routes be fully reimbursed by the Government, but no general subsidies be allowed to the airlines or the airport authorities.

18.81 The international services operate in an environment where bilateral agreements limit the traffic rights of airlines and the markets, the level of outputs and pricing freedom is limited through IATA rate-making, revenue pools, etc. Pooling removes competition and increases load factors. Nor are the tariffs related to lowest costs and therefore the incentive to control costs is poor. Though AI and IA operate in this environment they are increasingly being forced to the face up to the competition created in deregulated markets like the North Atlantic, parts of Europe and South East Asia. Some key factors in this situation are that the high IATA tariffs have encouraged low-fare scheduled and charter operations which are used frequently by price sensitive tourist traffic. In some cases, predominantly the USA, the airlines are forbidden to enter pools or be involved in the rate-making practice of IATA.

18.82 In this environment, AI has fared poorly. It has been losing in the more competitive and regulated markets. Though bilateral traffic rights on certain sectors of many routes are denied to AI, comparatively few limitations are imposed on foreign airlines operating through India. Bilateral agreements concluded on political and other

considerations erode the commercial viability of AI. AI, and increasingly IA, will have to operate in markets which will become more competitive. The national carriers would also aim for the more price sensitive tourist markets. Therefore, they will have to have a more competitive orientation in all their activities.

18.83 The Government should conclude bilateral agreements after giving greater weightage to commercial considerations of national carriers than at present. A stricter approach is required when allowing other carriers or new services into India, having them to operate Calcutta and Madras rather than Delhi or Bombay. Commercial considerations should be the main factor in allocating routes between the national carriers to neighbouring countries.

18.84 The Director General of Civil Aviation (DGCA) administers economic regulations related to airworthiness and safety, setting standards and ensuring their implementation for maintenance, overhaul and the quality of engineering, training, licensing and workload schedules of flights and cabin crew, technicians, engineers, *et al,* standardising and ensuring safe operation levels of aircraft, the infrastructure at airports, navigational and communication aids and meteorological standards, etc. It is important in these areas to review the practices of the constituent organisations in the light of international practices. Where efficiency can be improved within the scope of existing regulations, it is incumbent on the organisations to do so. But, where the regulations hinder the use of the man-machine systems to their fullest economic advantage, as can happen in a fast changing technological environment, it is the responsibility of the DGCA to periodically review and revise the regulations. Administratively ensuring the implementation of the review process has to be done by the Ministry of Civil Aviation. A coordination and planning wing in the Ministry can effectively satisfy this need.

Restructuring of Aviation Industry

18.85 The PGCA has indicated three reasons for restructuring the civil aviation industry, viz., to evolve a mechanism to monitor and ensure coordination amongst the constituent organisations, to raise finances for its growth and improve customer orientation.

18.86 After examining various possibilities, the PGCA felt that a holding company for AI and IA, exercising many of the powers presently vesting in the Government, could be a possible solution.

18.87 The PGCA recommended partial privatization of AI, by making it a joint stock company with majority holding of the Government and equity holdings being offered to staff and resident Indians to make it more customer oriented and also raise equity capital.

18.88 The first issue is whether a holding company provides the "arms length" between the Government and the airlines required to ensure that the airlines operate in their best commercial interest without Government influence on their functioning. Since international services are subject to a variety of agreements negotiated between Governments, any structure must accommodate the Government's international obligations. On the other hand, where domestic services operate in monopoly conditions there is a need to ensure that monopoly abuse is prevented. Further, to ensure the best economic use of national resources decisions may be required which an airline, or an airport authority, would be averse to make. It is the Government's responsibility to study such cases and decide on the issues and ensure their implementation. Finally, the separation between the organisations and the Government must be capable of enforcement in letter and in spirit. A review of the experience in this regard does not suggest that resolving these issues are axiomatic with the creation of a holding company.

18.89 There has been no case of privatization in India from which lessons applicable to the proposal to partially privatize AI can be inferred. In the USA and Britain, deregulation of controls and privatization have been comprehensive and for a longer duration. Therefore, to some extent their experience provides a basis for study. In those countries the enterprises were already reasonably efficient while operating in the regulated/public sector. Deregulation brought with it greater flexibility in staff hiring and firing practices. Though the companies did raise substantial finances by going public, there was, understandably, an initial period of turmoil. As the economic environment changed, many companies closed down or merged with others.

Though some of the companies show good performance, others do not. There is no unquestionable proof that their operations are affected significantly by privatization.

18.90 These considerations have to be viewed in the light of the situation in India. There is no doubt that with partial privatization in Air India's case the Government's majority interest will continue. If AI is privatized and the IA and others are not, then ensuring coordination between them will be a demanding task, even if they are under one holding company.

18.91 Another issue is the joint ownership of Vayudoot by AI and IA. It is conceivable that different perspectives of the role and development of Vayudoot may be held by the two parent airlines. Since the role of Vayudoot is primarily different from either of them, it is suggested that it be made an independent company.

18.92 An expert group constituted by the Ministry is understood to have completed its study of the areas of coordination between the airlines. It is suggested that action in such areas as have been identified should be commenced without awaiting the final outcome regarding the formation of the holding company or privatization. An in-depth examination of the issues involved is necessary before a decision is taken on the restructuring of the industry.

18.93 Action to ease the regulations to permit the leasing of aircraft should be initiated. The purchase of aircraft should be related to the growth of the economy as a whole and the profitability of the airline concerned in particular. To avoid being saddled with non-productive overcapacity in case of downturn in the economy or declining earnings, or having to maintain and operate technologically outdated fleet, the airlines should have available to them the option of catering to incremental traffic by leasing aircraft as and when required unhampered by constraining regulations.

XIX PIPELINES

Pipelines are used to transport a wide range of liquid and gaseous commodities. Traditionally they have carried water, crude oil, petroleum products and natural gas. Since the commissioning of the first crude oil pipeline in 1859 in the USA, the world-wide petroleum network has now grown to over two and a half million kms of pipelines, with over 40,000 kms being added annually. In recent years, pipeline transportation of coal and certain mineral ores in slurry form has also started.

Pipelines in India

19.2 The use of pipelines by the petroleum industry in India began with the 1,157 kms long crude oil pipeline from Naharkotiya to Barauni in 1962. Subsequent expansion of the network has primarily been in conjunction with the development of new oil and gas projects. Table 19.1 below summarizes the length of pipelines used for transportation by the petroleum industry in India since 1971.

TABLE 19.1. LENGTH OF PETROLEUM INDUSTRY PIPELINES

(in kilometres)

As on:	1.1.1971	1.1.1975	1.4.1981	1.4.1986
Crude Oil				
On-shore	1437.0	1524.7	3140.0	3141.1
Off-shore	-	-	225.1	275.6
Total	1437.0	1524.7	3365.1	3416.7
Petroleum Products	1789.0	2107.0	2110.7	2713.2
Natural Gas				
On-shore	165.0	208.1	224.3	352.4
Off-shore	-	-	225.8	470.0
Total	165.0	208.1	450.1	914.9*

* Difference is unaccounted for in the source material.

Source: Indian Petroleum and Natural Gas Statistics for appropriate years.

19.3 The Indian Oil Corporation (IOC), owns and operates about 55 per cent of the pipelines in the country, mostly for product movement. The Oil and Natural Gas Commission (ONGC) owns about 22 per cent of the lines with approximately equal lengths for crude oil and natural gas. Oil India Ltd. (OIL) has about 21 per cent of the lines, of which nearly 97 per cent are for transporting crude oil. In addition to these are the 140 kms long pipelines of Assam Gas Co. and another 140 kms of Hindustan Petroleum Corporation's Bombay-Pune product line which is not functioning at present.

19.4 The major pipeline for the movement of natural gas is the 1,749 kms long Hazira-Bijapur-Jagdishpur (HBJ) line under construction for the Gas Authority of India Limited (GAIL), at an estimated cost of Rs 1,700.17 crore. It is being commissioned in stages. The first stage from Hazira to Bijapur, 640 kms in length, was commissioned in August, 1987. The older pipelines are comparatively shorter in length.

19.5 Pipelines to transport solids consist of the 67.5 kms long pipeline from the Kudremukh mines to Mangalore port to move iron ore, a 10.5 kms long rock phosphate concentrate pipeline at Meton, and shorter pipelines for copper tailings at Malankhanj and iron ore tailings at Kudremukh. A 30 kms long experimental coal slurry pipeline is proposed from the New Majri coal mine of the Western Coalfields to the Chandrapur Thermal Power Station. The performance results are expected to be available during the Eighth Plan period.

Advantages and Limitations of Pipelines

19.6 The operational advantages that pipelines provide over other modes of transportation are that: (a) there is no return load or empty wagon movement; (b) losses due to spillage, evaporation, etc., are minimised; (c) the flow is steady as compared to the surface modes; (d) manpower requirement is low; (e) the effect on the environment is minimal; (f) energy consumption is low; and (g) commodity movement is fast.

19.7 The limitations of pipelines are that: (a) they are inflexible; (b) require selective grouping of materials for transportation; (c) are capital intensive and (d) require an alternative system and/or higher storage capacity to maintain flow of supplies when the system is closed. The pipelines which transport solids require large quantities of water at the origin for slurry formation and dewatering facilities at the destination, and are subject to wear and tear due to abrasion.

19.8 The study by the Planning Group on Pipelines indicates that the pipelines must have high levels of utilization so that their high capital costs are off-set by low operating costs. For petroleum products, pipelines could be economical, subject to terrain and technical viability, etc., for demand levels greater than 1.25 million tonnes per annum. The economics of transporting solids by pipelines, however, still remains to be established conclusively.

Crude Oil and Petroleum Products Demands

19.9 Table 19.2 below shows the growth in the demand for petroleum products and crude oil production in the country over the last 15 years:

TABLE 19.2 : DEMAND FOR PETROLEUM PRODUCTS AND CRUDE OIL

(Million tonnes)

Particulars	1970-71	1975-76	1980-81	1985-86
I. Petroleum Products				
a. Total domestic production	17.11	20.83	24.12	39.88
b. Import	1.09	2.22	7.29	3.87
c. Total product demand	18.20	23.05	31.41	43.75
II. Crude Oil				
a. Domestic production	6.82	8.45	10.51	30.17
b. Imports	11.68	13.62	16.25	15.14
c. Total crude supply	18.50	22.07	26.76	45.31
III. Refineries in India				
a. Refining capacity	36.05	38.55	39.55	45.95
b. Number of refineries	9	10	11	12

Source: *Indian Petroleum and Natural Gas Statistics, 1986-87.*

19.10 The annual growth rates of total product demand and crude oil supply have averaged 6.0 per cent and 6.15 per cent respectively for the last 15 years. The import of products and crude oil, which rose during the 1970's, got reduced due to the exploitation of large off-shore reserves - 69 per cent of domestic crude production in 1985-86 was from off-shore reserves.

19.11 Nearly 90 per cent of India's known reserves of crude oil are in off-shore basins. On-shore crude is produced in Assam and Gujarat. India exports small quantities of naptha, fuel oil and crude oil. Our main imports are diesel and kerosene and specific types of crude oil.

Refineries

19.12 Of the 12 refineries in the country, six are coastal and the remaining six are inland. The average growth of refining capacity in the last 15 years has been 1.6 per cent per year. The latest approved additions to the refining capacity are the new refinery at Karnal and the expansion of the refineries at Mathura and Koyali and the Bongaingaon Refinery & Petrochemichals Ltd. (BRPL), Assam. New refineries at Mangalore and in Assam are under consideration. On completion of all these projects, the total refining capacity will reach about 63 million tonnes per annum in the mid 1990's. No decision has been taken regarding the total refining capacity or the number of refineries expected to be in operation by 2000 AD.

Transportation of POL

19.13 The total originating tonnage of crude oil and petroleum products, using all modes of transportation, was about 89.06 million tonnes in 1985-86. This was 2.35 times higher than the tonnage in 1970-71.

19.14 Practically all overland crude oil movement is done through pipelines. In 1985-86, pipelines were used to move 8.66 million tonnes of petroleum products, as against the rated capacity of about 12.6 million tonnes per year. The capacity represents about 50 per cent of the total product output that can be transported through pipes i.e. excluding the heavy ends and hazardous materials, and along routes where the product demand is too low to justify the provision of pipelines.

19.15 In 1985-86, the railways carried about 18.6 million tonnes of products with an average lead of 588 kms. Though an estimate of the tonnage transported by the roadways in 1985-86 is not available, the RITES survey of inter-regional movements in 1986-87 shows that the tonnage carried by road transport was about 9.7 million tonnes, with an average lead nearly half of that of the railways. In addition to the inter-state carriage, road transport moves products from the bulk distribution centres to the retail outlets, figures of which are not available.

Forecasts of POL Demand

19.16 The demand estimates for petroleum products (based on two different scenarios) and corresponding levels of crude oil intake developed by a Committee of the Ministry of Petroleum and Natural Gas are shown in Table 19.3 below:

TABLE 19.3. DEMAND FORECAST FOR PETROLEUM PRODUCTS AND CRUDE OIL

(million tonnes)

Particulars	1989-90	1994-95	1999-2000
I. Petroleum product demand			
i. Lower level	54.14	73.13	91.94
ii. Upper level	60.66	83.06	101.87
II. Crude oil intake	50.18	59.90	59.90*

* Crude oil production and import assumed at the same level as 1994-95; additional demand to be met by increased use of natural gas.

Source: Oil Coordination Committee.

19.17 The Oil Coordination Committee (OCC) has indicated that the lower level estimates of product demand till 1994-95 are based on the projects already approved by the Planning Commission. The upper level estimates take into account additional projects which may be cleared during the Seventh and Eighth Plan periods. The difference between the two scenarios is primarily on account of the additional liquid hydrocarbon consumption assumed for petrochemicals, fertilisers and power stations.

19.18 The total originating tonnage of crude oil

and petroleum products expected to be transported by 2000 AD therefore ranges between 151.8 and 161.7 million tonnes per year.

Natural Gas

19.19 Table 19.4 shows the production and use of natural gas in India during the last 15 years. The rate of growth of total production has averaged 12.2 per cent per year, the major share being that of off-shore gas.

TABLE 19.4. PRODUCTION AND USE OF NATURAL GAS
(million cubic metres - mcm)

Particulars	1970-71	1975-76	1980-81	1985-86
I. Gross production				
a. Onshore	1,445	2,368	1,685	2,954
b. Offshore	-	-	673	5,180
Total production	1,445	2,368	2,358	8,134
II. Utilisation				
a. Energy use	460	659	890	2,416
b. Non-energy use	187	465	632	2,534
c. Flared	762	1,082	769	3,118
d. Reinjected	36	162	67	66

Note: i. "Onshore" includes Gujarat, Assam and other North-Eastern States.
ii. "Energy use" includes power generation, industrial and domestic fuel, tea plantation, LPG shrinkage and captive use.
iii. "Non-energy use" includes fertilizers, petro-chemicals and others.
Source: *Indian Petroleum & Natural Gas Statistics, 1986-87.*

19.20 The utilisation of gas has grown at the rate of 14.5 per cent per year during the last 15 years. The non-energy use of gas has grown rapidly. In 1985-86, it accounted for 31.1 per cent of the total use of natural gas. The second highest share, 29.7 per cent, was for power generation. The share of total production that is flared, 38.3 per cent is very high as compared to the world average of about 5.5 per cent.

Production of Natural Gas

19.21 The available reserves of natural gas in India in 1985 were 478.63 billion cubic metres, of which nearly 77 per cent were in off-shore reserves. Gujarat on-shore constituted only 4.6 per cent and North-Eastern States on-shore about 18 per cent.

19.22 The Planning Group on Pipelines has forecast that by 2000 AD the production of associated gas will decline to about 12.4 mcm/day, but the availability of free gas would rise to 36.6 mcm/day. The result would be that in the normal course the total production of natural gas would be about 17,885 mcm annually, implying an annual growth rate of about 6.4 per cent, with the production concentrated in Western India. With all out concerted efforts and considering the possibility of finding gas in the North-Eastern States and the Eastern off-shore basins, the production could reach 130 mcm/day i.e. 47,450 mcm annually.

Proposed Pipeline Requirements

19.23 A summary of the new pipelines proposed till the turn of the century in separate reports of the Planning Group on Pipelines, the Sub-Group on Marketing and Distribution of Products of the Working Committee for Seventh Plan and the ONGC, is given in Annexure 19.1. A number of these suggestions overlap and studies are required to prioritize them.

Issues Regarding Development of Pipelines

19.24 From the forecasts it is estimated that tonnage of crude oil to be transported in 1999-2000 will be about 32 per cent higher than the tonnage handled in 1985-86, rising from 45.31 to 59.9 million tonnes. The rise in the tonnage of products to be moved annually will be much higher i.e. from 43.75 to at least 91.94 million tonnes, an increase of nearly 110 per cent.

19.25 It is expected that the use of natural gas for manufacturing products and for power generation will be greater than liquid hydrocarbons, subject to the adoption of policy measures to boost production and consumption of natural gas. In view of this uncertainty, only a broad assessment of the growth of production and consumption can be made. By 2000 AD the increase in production can range between 2.2 and 5.8 times the level of 1985-86 production. The level of consumption, assuming a 10 per cent level of flaring, can range between 3.3 and 8.6 times of the 1985-86 level.

19.26 Better estimates are required to undertake planning exercise for long-term development of pipelines. The broad ranges in fact highlight the

importance of developing a long term , coordinated perspective of the use of liquid hydrocarbons and natural gas. It is recommended that the Ministry of Petroleum and Natural Gas address this issue urgently.

19.27 Notwithstanding the policy to be ultimately adopted, the key factors for preparing a Petroleum, Oils and Lubricants (POL) pipeline network plan are the following:

a) Minimising the total transportation costs of products should be a major factor in deciding the refinery locations. As the movement of a variety of products out of refineries presents a more complex situation than the transportation of crude oil to the refinery, refinery locations should be near the consumption centres.

b) Corridors where existing road and rail networks can be economically replaced by pipelines should be identified. The studies should be along corridors with a minimum demand of 1.25 million tonnes per year of pipeline POL products, and ought to consider the conditions of terrain, technical feasibility, etc.

c) Pipeline capacity should be augmented along existing pipelines, wherever justified on economic considerations.

19.28 The planning of pipelines between the ports and inland destinations has to be related to ship-borne POL traffic. The capacity for handling POL is to be augmented to 79.75 million tonnes by the end of the Seventh Plan period. To link the ports with the demand centres by pipelines, the following studies are required:

a) Identify ports for imported and coastal movement of crude *vis-a-vis* existing and new refineries.

b) Identify destination ports for handling imports and exports of POL.

c) Study the economics of carriage of POL by pipelines as compared to coastal vessels. Studies done in other countries, show that in some cases transportation by pipelines are cheaper than by coastal shipping.

19.29 Subject to the policy regarding the use of natural gas, the development of a national gas grid can be undertaken in a phased manner, starting with local gas grids. These may subsequently be extended to regional and national networks. Economic analyses should cover facility of modifying existing POL based industries for use of natural gas, and in particular use of gas in power plants which are distant from coal mines, etc. In the case of power plants, studies are also required to determine whether it would be economical for the plants to be located at the gas fields and power transmitted to load centres or gas should be transported to power stations located near the load centres.

19.30 Since, in addition to the gas reserves in Bombay High there are indications of gas availability in the Krishna, Godavari and Cauvery basins, the location of gas based industries in the Orissa and Andhra belt could be examined. In either case, the feasibility of setting up industries using imported Liquified Natural Gas (LNG) and later switching to indigenous gas can be examined.

19.31 The pipeline operating organisations should aim to achieve a low distribution cost. Each organisation should develop detailed managerial control systems and quantitative targets for their pipeline divisions.

19.32 There is the need to strengthen multi-project planning and project implementation which ensure that all segments of a network are completed and effectively utilized on schedule. The case of the HBJ pipeline illustrates this need. The pipeline is designed to carry Bombay High off-shore gas to three power and six fertilizer plants. However, it is reported that the completion of three power plants and as many fertiliser plants may be delayed by at least a year due to a variety of reasons. These delays will result in the pipeline being underutilized and the flaring of unused gas will continue, with all their attendant economic losses till these or alternate projects are completed.

19.33 A programme for training, research and studies related to the planning and operation of pipelines ought to be instituted by the pipeline owning organisations, since there is no agency today which performs these functions. An Institute of Pipeline Studies would maintain a data centre and provide a forum for research to all the organisations. The Institute would not coordinate the marketing and distribution systems of POL and natural gas. These functions could be carried out by the OCC and GAIL respectively.

19.34 The capital investments in pipelines has two components that require large outlays of foreign exchange. They are: (a) acquisition of pipes, operating and laying equipment; and (b) the installation of the system. These are specialised jobs and substantial quantities of this work are currently contracted to foreign companies. To reduce the continued dependence on foreign expertise and foreign exchange expenditure, indigenous expertise and manufacturing capability should be developed in these disciplines on a high priority bases. Whereas indigenisation has started with the manufacture of ancillary equipment for crude oil drilling and production, the manufacture of steel of requisite specifications is virtually non-existent. Even the tonnage of pipes manufactured with imported steel has been very low.

19.35 A multi-organisation inter-disciplinary study to identify priority areas for standardisation and developing self-reliance, and the time frame for indigenisation is required. The study should also identify the monitoring, information and control and communication and sub-systems. After the initial study, the Institute of Pipeline Studies could be responsible for maintaining the data in updating them.

Ownership and Financing

19.36 The Planning Group on Pipelines has suggested a system of retention pricing for the pipeline owning companies to finance pipelines and generate reserves. The ownership and financing of pipeline systems can follow the undermentioned three basic patterns:

a) The pipelines are a captive facility of an organisation to transport only their product. Therefore, the investment will be by the owner.

b) The prime user is the owner, but the non-owners also use the system on payment of freight charges. The initial investment will be by the owner.

c) A single transporter serves many bulk users. Here the capital investment could be shared by the transporter and the bulk users at a mutually agreed ratio. The ratio could be on the basis of guaranteed volume of products to be transported per annum.

19.37 The Committee is not in a position to comment on the terms to be laid down for capital and freight charges, but in principle, the ownership and financing methods proposed by the Planning Group appear reasonable. In addition, the possibility of levying an "environmental cess" on the basis of throughput should be considered. The cess would be used to alleviate any adverse environmental affect and would be administered by the pipeline owners.

Future Possibilities

19.38 Of the solids that can be moved through pipelines, it appears that only coal has economic possibilities. On the basis of initial studies, the Planning Group on Pipelines has assessed that only in the case of coal are costs of transportation likely to break even with surface modes. For this to happen, the volumes to be moved and the distances to be transported would have to be large. Water availability at the origin, to make the slurry, could be a limiting factor.

19.39 For the long-term, the Planning Group on Pipelines has indicated two possible scenarios for transporting fuels through pipelines: (a) the movement of coal converted into the form of synthetic gas or liquid; and (b) transportation of hydrogen, produced as a part of the working process of thermo-nuclear fusion power plants. The conversion of coal is dependent on the economics of the use of coal *vis-a-vis* oil, and the costs of generation at pit head *vs.* at the load centre. The production and use of hydrogen is a technical problem primarily dependent on the development of fusion reactors, whose promise is still to be matched by practicability. The transportation of hydrogen by using natural gas pipelines appears to offer fewer problems. According to the Planning Group, the experience gained in transmitting mixtures of hydrogen and natural gas through gas lines shows that the presently engineered natural gas lines could be operated safely, reliably and economically on a long-term basis.

NOTE

1. (i) Ganga-Bhagirathi-Hoogly system (ii) Brahmaputra-Barak (iii) Brahmani-Mahanadi (iv) Godavari-Krishna (v) West Coast Canal and Backwaters (vi) Narmada, and (vii) Zuari-Mandovi system.

ANNEXURE 19.1

LIST OF PIPELINES PROPOSED

A. Crude oil

i. Branch line ex-Salaya-Mathura to Karnal from Chaksu,
ii. Bombay High offshore-to-Koyali-Viramgram via-Hazira or Uran,
iii. Kalol-Koyali,
iv. Haldia-Barauni, if Assam crude availability is inadequate for Barauni refinery requirements,
v. Imported crude from destination ports to new refineries, and
vi. Kandla-Bhatinda.

B. Products

vii. Generally, product consuming centres with a minimum demand of 1.25mt/year to be connected with refineries,

New pipelines, total length 1,730 kms, between

viii. Cochin-Coimbatore,
ix. Vishakapatanam-Vijayawada,
x. Bombay-Manmad,
xi. Mangalore-Bangalore, and
xii. Bongaigaon-Barauni.

Expansion of existing lines, total length 1,977 kms., between

xiii. Haldia-Mourigram-Rajbandh,
xiv. Haldia-Barauni,
xv. Barauni-Kanpur, and
xvi. Mathura-Jallandhar

C. Natural Gas

Extend the HBJ line as follows:

xvii. Babrala-Delhi-Karnal
xviii. Jagdishpur-Phulpur
xix. Anta-Kota
xx. Provide for bulk consumption at Jhansi and Ujjain
xxi. Develop local gas grids in Gujarat, Assam and Bombay.
xxii. Develop a national grid.

HOUSING POLICY

Ministry of Urban Development, Government of India, issued a draft statement on Housing Policy, in May, 1990. In the following is its text.

Background

1.1. Despite quantitative increase in the housing stock over successive plan periods, the housing situation in rural and urban areas continues to be daunting. Urgent efforts are needed to curb speculation and profiteering in land, to arrest spiralling rents and prices of land, and to protect physical resources for rural housing from rampant commercialisation. Housing is both a basic need and an essential element in the overall socio-economic development. Housing stimulates economic activity and employment, activises household savings, and provides the base for achieving crucial goals in the sectors of health, education and sanitation. For the women in disadvantaged situations, housing leads to more decent living.

1.2. The Approach Paper for the 8th Five Year Plan approved by the Government recognizes the housing needs of different income groups in urban and rural areas with special attention to the needs of the poorer sections, women and disadvantaged groups. There is significant employment potential in housing activity in itself as well as in its backward and forward linkages. The concern for housing is reflected in the manifestoes of the National Front, BJP, CPI(M) and other major national parties. Consequently, the Action Plan announced by the Prime Minister envisaged that a comprehensive National Housing Policy would be framed for different sections of the society, with specific programmes directed towards the poor and for improving the housing finance system. The Global Shelter Strategy adopted by the U.N. in November, 1988 also calls upon different Governments to take steps for the formulation of national housing policies to achieve the goals of this strategy. The earlier policy document tabled in both Houses of Parliament in May, 1988 also recognized the need for the policy to be dynamic enough to meet the emerging needs and demands of the socio-economic conditions, as well as the diverse needs of different regions in a federal State.

2. Objectives

2.1. Shelter and development are mutually supportive. Housing contributed 16.72 per cent to gross domestic capital formation in 1984-85 and 3.22 per cent to Gross National Product. Housing Policy should consciously recognise the role of housing and infrastructure in the larger context of economic development, support industrial and other investments, integrated development of rural settlements, and advance the economic and social status of individual households. Housing is also to be regarded as part of the strategy for augmenting employment and upgrading skills in rural and urban areas. It is estimated that an investment of Rs 1 crore at 1990 prices will generate 670 man-years of employment.

2.2. The present output of housing units by way of construction and upgradation under various schemes taken up by the Government agencies like Housing Boards or Development Authorities and financed by formal institutions like Banks, Cooperatives, etc., in the rural and urban areas is only about ten lakh. In contrast, the bulk of the housing in the country, which is estimated to be 2 to 3 times that number, and with varying standards and specifications, is constructed by the people themselves with their own resources without recourse to Government agencies or financial institutions. A major proportion of all housing activity specially in the rural areas is based on bio-mass resources, and is almost outside the monetised economy. What this means that it is the people who can and do build the bulk of the housing units themselves. What they cannot do is to obtain land, assemble it in large sizes and arrange the basic infrastructure of water supply, sanitation, roads, lighting, etc. Government should not therefore, try to build houses itself: its crucial role is to create an environment which enables the full potential and resources of the people to be fully utilised and constraints to housing to be removed. This calls for a major reorientation and strengthening of public agencies at all levels.

2.3. A democratic State must guarantee conditions where all women and men may gain and retain adequate housing and where they and

their children can live with security and dignity. This includes the obligation of the State to improve the quality of life through the provision of drinking water, sanitation, roads and other basic services at the household and city level.

2.4. While housing policy would seek to address a spectrum of shelter needs of all the sections of society, the State should assume a direct responsibility for improving the housing situation of the absolutely houseless, the displaced and dishoused persons, women in disadvantaged circumstances, scheduled castes and scheduled tribes, the economically weaker sections and other groups in dire need of assistance. These direct initiatives of the States would be placed in the framework of policies to address urban and rural poverty and employment promotion as a well as increased access to basic services. Shelter upgradation should be given as much importance as new construction. Rental housing needs to be encouraged to meet the needs of the new migrants and those unable to secure access to ownership tenure.

2.5. In a vast country with tremendous variations, the objective of housing policy would be to respond in a flexible manner to the diverse needs and resource endowments of different regions, and conserve the country's heritage in vernacular architecture and human settlements forms.

2.6. With a view to preventing the concentration of land in the hands of a few persons, and speculation and profiteering therein, housing policy should endeavour to bring about an equitable distribution of land for housing in urban and rural settlements through legal and fiscal measures, and secure the access of poor households to land.

2.7. Fiscal and monetary policies as well as the levy of taxes at different levels of government should be oriented to create favourable conditions for increased investment in housing, for both new construction and conservation of existing housing stock, with due regard to the need to safeguard the poorer sections from exploitative forces in the market.

2.8. Given the considerable advances made in technology in different sectors by the country, science and technology must be harnessed to the needs of shelter sector, both for optimising the use of scarce conventional building resources, and for achieving in various ways reduction of the cost of shelter provision to levels affordable to various income groups.

2.9. Since much of housing activity in rural areas depends on bio-mass, the strategy for housing in rural settlements should be based on:-

(a) regeneration and protection of the natural resource base,

(b) ensuring the access of the people to these resources,

(c) strengthening and developing traditional building systems, skills, technologies and materials, and

(d) where unavoidable, ensuring the proper rehabilitation of neighbourhoods displaced by various projects with full community involvement.

2.10. To tackle the problem of housing in urban settlements including the improvement of slums and squatter settlements, the State should assist in:-

(a) increasing the availability of residential land in suitable locations with security of tenure for various income groups, with due regard to the needs of the poorer sections;

(b) support incremental self building through financial and technical support,

(c) encouragement to *in situ* upgradation and progressive development in low income settlements to the maximum extent possible,

(d) devising housing finance systems to respond to the varying needs and affordability of the community,

(e) promotion of appropriate technologies that maximise the use of locally available and recycled materials, and

(f) to create conditions under which relocation or removal of low income settlements is avoided.

2.11. The support to housing activity by public agencies and households would be placed within the larger context of city level and regional land use planning, programmes for expansion of infrastructural transport, and the projects of various formal sector institutions.

2.12. Housing would be addressed again in relation to the urban basic services strategy with the full involvement of voluntary agencies and community based organisations by the local

bodies in the planning, organisation, implementation and maintenance of housing and neighbourhood services.

2.13. Women have a vital stake in the management of family affairs, and suffer far more from deprived housing conditions and inadequate access to basic services and health care. Adequate attention will be given while devising programmes to meet the specific needs of women in disadvantaged circumstances, including widows and construction workers, in terms of joint or exclusive title, access to credit, home based employment, maternal and child welfare, and shelter design and to amend all related laws for this purpose.

2.14. In the Indian federal set up, housing and urban development are State subjects and housing policy is required to be primarily implemented by the State and local agencies. Housing policy and programmes should therefore take into account the views of the State Governments and an agreed housing strategy evolved, so as to build this into the outlays of the Five Year Plans. Of equal concern is the stress on decentralised execution of housing schemes in urban and rural areas, with local bodies suitably strengthened and committed enough to respond to the needs of the people and the requirements of development in a flexible manner.

3. Elements of Housing Policy

3.1. Housing norms

Housing norms would be evolved at the regional levels with due regard to different geo-climatic conditions and life styles of the people. The norms and standards would help in promoting the use of local materials and skills as well as the process of incremental construction. It would also seek to prevent the diversion of scarce resources in luxury construction. With due regard to the views of the State Governments, minimum as well as maximum housing norms would be prescribed at the national level, with allowance for local variations, and these will be incorporated in the lending norms of housing finance institutions as well as local building regulations. In rural areas, the size of the plot should not be less than 85 sq. mtrs. but not more than 200 sq. mtrs. In urban areas the size of the plot should not be less than 25 sq. mtrs. (which can be reduced to 20 sq. mtrs. in larger cities) but not more than 120 sq. mtrs.

Appropriate minimum and maximum housing norms in terms of size of plot and dwelling units will be laid down by the States/Union Territories concerned having regard to the local conditions and the national norms.

All these housing norms will be periodically reviewed and progressively improved.

3.2. Supply and Management of Land

3.2.1. Present Problems

Previous interventions by the public agencies have not achieved the purpose of supply of adequate serviced land at affordable rates to meet the needs of various income groups.

- In the rural areas, the poorer households face problems of tenure rights in homestead land and of securing plots for construction near existing habitations.
- The inability of the poorer households to gain access to legal shelter has led to the proliferation of squatter settlements and unauthorised colonies.
- The effective operation of the land market has been affected by the existing legal and regulatory framework as well as by slow expansion of infrastructure, and this has created conditions for unwarranted increase in land and housing prices, specially in larger cities and for the free play of speculators and profiteers.
- In a context of inadequate land for housing, the systems of land information and registration are very weak, and the land in the use of governmental as well as private owners is often locked up in inefficient uses.

3.2.2. Addressing Constraints

While the State should continue to acquire land compulsorily for essential public uses and the needs of the disadvantaged groups, efforts would be made to promote larger availability of land for housing activity in urban areas of various sizes and rural areas.

3.2.3. The review of the working of Urban Land (Ceiling and Regulation) Act shows that not much

land has been taken over by the State Government. The operation of this Act in the present form is stated to have frozen the land market, pushed up land prices, generated corruption, and in fact not achieved the social purpose of the Act. Early decision is needed on amendments to the Urban Land (Ceiling and Regulation) Act, 1976 in the concerned urban agglomerations in order to remove the inhibiting effects of urban land ceiling legislation without diluting its social purpose.

3.2.4. The National Commission on Urbanisation, (NCU) while agreeing to the need to retain ULC Act as a measure of social equity on the statute book, has emphasised that it should be rationalised and made easy for implementation. Various suggestions for amendment have been received from State Governments. These are of operational nature as well as basic change. The suggested procedural changes relate to the delegation of powers to the States to vary the area of urban agglomeration, for flexible definition of appurtenant land, for clubbing of vacant land State-wise instead of the country as a whole, and other minor details on the basis of field experience. The basic amendments would call for limiting the operation of the Act to certain large cities by recasting the schedules, and raising the ceiling on a family basis. There is a demand for deleting the provision for exemptions under Sections 20 & 21 as these provisions have often been abused and have not led to additional land for public purpose. The compensation amount can also be increased. Within the parameters of the Act, State Governments may consider the scope for permitting land development by the owner according to the guidelines of the schemes approved in some states.

3.2.5. Fiscal and municipal tax policy should be simultaneously applied by State and Local Governments in order to curb speculation in vacant land and in order to release such land for housing and urban development. A legislation for imposing tax on vacant land as suggested by NCU may be considered for this purpose at the State or Central level and the proceeds could be used to build up a Shelter Fund.

3.2.6. Measures would be devised by Central and State Governments for generating resources for urban infrastructure and housing by promoting the more efficient use of land in uneconomic use or frozen under existing regulations. Examples are the shifting of Jute or Textile factories from major cities and recycling such land for raising resources.

3.2.7. Land use controls and standards of infrastructure would be revised by State Governments and Local Bodies in order to promote housing activity by the poorer households and to reduce shelter cost. Cooperative and group efforts would be encouraged in the field of land development and house construction.

3.2.8. While encouraging the activities of legitimate private developers, legislation would be considered on the lines of Maharashtra Ownership of Flats Act for safeguarding the interest of the general public.

3.2.9. A systematic land information system and registration would be introduced in all the urban areas with central assistance, and this would also assist in the larger flow of finance.

Servicing Land - Rural and Urban

3.2.10. The development of house sites and the upgradation of housing and rural areas would be linked with activities under the integrated rural development programme and RLEG (Rural Landless Employment Guarantee Programme) investments on the model of Andhra Pradesh.

3.2.11. In order to meet the needs of serviced land, emphasis would be given for augmenting urban infrastructure by the State agencies and local bodies. The investment in urban development, water supply and sanitation has remained at around 2 to 2.5 per cent over the successive plan periods. In real terms, the investment has actually declined over the last 10 years. In order to increase the coverage of water supply to 100 per cent and that of sanitation to 75 per cent, the funds required for the 8th Plan are estimated to be to the tune of Rs 14,000 crore, against the 7th Plan provision of Rs 3,000 crore. The Task Force Report of the Planning Commission worked out the investment requirements in all urban infrastructure at about Rs 25,000 crore over 1991 to 2001 at constant prices. The NCU has advocated concentrated investment in 329 Generators of Economic Momentum (GEM) in order to promote balanced

urbanisation that sustains economic growth, housing activity and equitable provision of services. The NCU advocated an increase in the share of public investment for urban development to 8 per cent over 1990-95.

3.2.12. Specialised institutions would be set up at national and state level for increasing the flow of funds for this purpose. The Government has agreed in principle to set up a separate institution at the national level for this purpose. Meanwhile, HUDCO has to be assisted by way of equity and access to borrowing to expand lending for infrastructure. This is the only way additional land can be brought into the market for legitimate housing activity. Since bulk of informal or unauthorised colonies represent only housing solutions in violation of planning laws measures can be devised to provide services to such colonies on payment by residents.

3.2.13. The owners of land could be involved in the development of land for housing and public purposes by Town Planning Schemes on the model of Gujarat in urban agglomerations not covered by the Urban Land (Ceiling and Regulation) Act. The scope for participative land development with the involvement of corporate sector in the model of industrial townships can be further supported with certain safeguards so that corporate investment can be induced to pay for development of new land within an agreed framework. This has also been recommended by the NCU.

3.3. Slums and Squatter Settlements

3.3.1 . The growth of slums is a sign of inability of people to afford land and shelter through the normal market and the failure of the Government to ensure the equitable access of the poor to the land and services. It is estimated that about 512.3 lakh persons will be living in slums and squatter colonies by 1990. Apart from this, over 50 per cent of the families in urban areas are living in dilapidated one-room tenements.

3.3.2. The progressive coverage in slums of basic amenities under the Environmental Improvement of Urban Slums (EIUS) programme till March, 1990 is estimated at about 250 lakh only. The slum dwellers live in extremely deprived conditions with insecure tenure and temporary shelter. The problems faced by women are more severe. On the other hand, the plan provision has been extremely inadequate for the seven basic services in slums. The NCU has recommended an integrated provision of all the basic services through the municipalities, based on NGOs and Community participation. This has been reflected in the proposal of the Ministry of Urban Development to introduce a major scheme of Urban Basic Services (UBS) during the 8th Plan in order to improve the access of the basic services, social inputs, employment opportunities and shelter upgradation.

3.3.3. The emphasis would be on security of tenure and assistance for *in situ* upgradation of houses and provision of basic services, wherever possible. This would be tied to employment programme. Where such residents of slums are required to be relocated in public interest, the approach would be to relocate them to alternate sites in suitable locations in full consultation with the community. This is the strategy proposed for Delhi.

3.4. Housing Finance

3.4.1. Lack of financial resources is a crucial constraint to housing activity for the ordinary individual alongwith land and services. At the same time, the rate of savings at the household level is significant. The CSO has estimated the gross domestic savings for 1985-86 at 22 per cent (based year 1980-81) and net savings at 13.3 per cent. A study made for the Ministry of Urban Development by the Society of Development Studies (SDS) disaggregates this savings rate into 21 per cent for formal sector and 12.1 per cent for informal sector households. In terms of absolute amounts, and breaking down the CSO estimates, the urban savings in 1985-86 was Rs 13,000 crore and the rural savings Rs 6,125 crore with an assumption that the proportion of the rural savings is about 30-35 per cent of the total savings. There is considerable scope for capturing the potential savings including that of informal sector households through schemes linked to guaranteed loans and access to legal shelter. The formal system covers only 20 per cent of the total financial needs

of households. The sources of informal sayings are seen to be cash and bank deposits, liquidation of assets like jewellery, loans from friends and relatives, and a small proportion of funds from moneylenders. It is related to the level and pattern of income, nature of occupation, the urban environment, asset ownership, lumpy expenditure and family size.

Inadequacies in Traditional Housing Finance System

3.4.2. Institutional financial intermediation played a minor role in the resource mobilisation efforts of households for housing. The bulk of the population is still outside the reach of the formal financing institutions owing to various operational and structural inadequacies. Some of the major inadequacies of the existing housing finance system are both institutional and operational, inherent in a conventional and under developed housing finance system . The restrictive access to conventional financial system is a direct result of approach, practices and norms that effectively disqualify a large proportion of potential borrowers. The disqualifications are linked to one or more of the several criterion such as adequate income level, regular and verifiable flow of income and acceptable collateral that form the basis for a housing loan appraisal. The operational inadequacies relate to the size of the loan, the margin money contribution of the borrower, the loan to-home-value-ratio, fixed and regular amortisation schedule, specific period of amortisation, high loan servicing cost and complex loan terms and conditions which are difficult to understand and to comply.

Improving Access to Housing Finance and other Issues

The limitations of the traditional Housing Finance System can be addressed through a package of programmes which would inter-alia:-

(i) Develop, strengthen and extend Housing Finance System through provision of support services to spread risks and increase liquidity;

(ii) Develop innovative and non-conventional approaches, operational norms relating to appraisal, sanctions, disbursement and recovery of home loan;

(iii) Development institutions and delivery mechanisms to provide housing finance services to non-eligible segment of households in rural areas and informal settlements.

In brief, what is required is the creation of institutional framework that will mobilise savings for housing, meet the credit needs of households and institutions, as well as spread risks of home loan originators.

3.4.4. The housing finance system should be structured in a manner that responds to the specific shelter needs, income pattern, and the living conditions of households in different parts of the country. It has to deal in a harmonised way not only with the operations of housing finance institutions, commercial banks and HUDCO for catering to the needs of different income groups, but link their lending operations with the housing programmes of State Governments and local bodies.

3.4.5. In the rural context, the financial needs for new construction and upgradation have to be built in to the district credit plan and the operations of the rural cooperatives and land mortgage banks.

3.4.6. Housing finance as a part of overall strategy of lending for basic needs in urban and rural areas cannot operate on lending norms more rigid than those operated by NABARD or industrial finance institutions.

3.4.7. In Housing Finance, so far, the Planning Commission and major providers of finances have adopted income norms as criteria for extending credit to different groups. This approach is also consistent with the existing principle of identification of households below poverty line and other welfare schemes under implementation in the country. The income norms have to be suitably restructured for equitable provision of housing finance.

3.4.8. Appropriate changes in the approaches of the existing financial institutions would be made in order to make them more responsive and to increase the access of the households excluded currently form their operations. The National Housing Bank would be encouraged to concentrate on the promotion and regulation of housing

finance institutions in the public and private sector, mobilisation of household savings, increasing the access of different income groups to loans for different shelter activities, increasing the reach of the poorer sections to housing loans, and to concentrate on refinancing the operations of financing institutions and cooperatives engaged in housing. The Home Loan Account Scheme launched by National Housing Bank with the intended objective of mobilising Rs 1,000 crore per annum from the household sector including very small amounts can be a potential source of housing finance.

The special role of HUDCO as a techno financial agency devoted to the cause of housing for the income groups in urban and rural areas, and for the expansion of urban infrastructure would be recognised and further expanded.

Mortgage Insurance

3.4.9. In order to promote larger finance for housing activity in the country, it will be necessary to provide an insurance cover to the lender against non-repayment by the borrower by a suitable Mortgage Insurance Scheme under the appropriate enabling legislation. This will be accompanied by suitable legislative provisions for a speedy foreclosure system to enable realisation of defaulted dues by housing finance institutions.

Resource Mobilisation for Housing

3.4.10. The Housing Finance System will need to be reorganised with interest rates and fiscal measures geared to mobilise savings and resources. There is considerable scope for mobilisation of substantial resources in the economy for the housing sector provided innovative strategies and instruments are adopted.

Approaches similar to a number of countries of lending at differentiated rates could be adopted commensurate with the loan absorbing and loan servicing capacities of different income groups in different shelter situations if substantial resources are mobilised by contractual savings schemes or other measures.

3.4.11. In the macro-economic context, housing finance will be integrated over a period with the financial market for resource mobilisation and consistent credit norms across different sectors.

3.4.12. As declared by the Finance Minister, in his budget speech for 1990-91 there is a case for introducing a time bound scheme which would promote the undeclared income and hidden wealth to be used for one or more social purposes such as slum clearance, building of houses for lower and middle income groups, etc. In the past, various measures have been introduced to bring in black money through the bearer bonds, capital gains bonds, Indira Vikas Patra, etc. The Government may float bonds/debentures, the proceeds of which will be used entirely for housing the poor provided the source of funds invested in such bond is not questioned. Detailed proposals will be worked out for early introduction of the scheme.

Secondary Mortgage Market

3.4.13. The idea of creating a Secondary Mortgage Market is to attract funds from a broader range of investors and to integrate housing finance with the finance market. The main function of the Secondary Mortgage Market is to enable holder of functioning instruments i.e. Mortgage or Mortgage based securities to obtain cash for them by passing them to other holders, liquidity into instruments and eventually capital into the market.

3.4.14. Action is needed in the following five crucial areas for introduction of Secondary market for mortgage-backed securities:-

1. Quality of asset;
2. Assessment of market potential;
3. Instrument design and pricing;
4. Secondary institution;
5. Operational details;

3.4.15. The major investors like LIC, UTI, GIC, Provident Fund, etc. may be induced to participate in the scheme. The Secondary Mortgage Market can be promoted simultaneously with the existing schemes of NHB for the mobilisation of resources.

Fiscal Incentives for Housing Sector

3.4.16. Fiscal incentives provided under the laws relating to taxation of income, wealth, gifts, etc. will be rationalised to channel savings into housing finance institutions and promote investment in housing activity. For those not eligible for such incentives, alternative incentive schemes will be devised.

3.4.17. Provision of adequate concessions in taxes and duties on transfers, conveyances, leases and mortgages between developers or approved financing institutions and the "first home-owners" will be given due consideration.

3.4.18. In order to induce employers in the organised sector, including industry, to provide housing for their employees and workers, appropriate fiscal incentives will be extended. Specific proposals in this regard will be brought forward by the Government in order to encourage both ownership and rental housing, and house repairs with corresponding benefits for non-tax payers.

3.4.19. The present tax system encourages diversion of investible resources into high income and luxury housing. The high rate of return on luxury housing should be reduced by specific measures including withdrawal of existing tax concessions for owner occupied and rented luxury houses.

3.4.20. Incidence of indirect taxes on building materials and components will be reviewed with a view to bring down the cost of construction especially for the households who derive no direct tax concession from housing investment. Government has already exempted duties on materials made out of fly-ash and for components manufactured in building centres.

3.4.21. Incentives will be given to promote the manufacture of new building materials and components produced out of agricultural, industrial and other wastes and those which substitute or reduce the use of scarce resources like wood and energy-intensive materials like iron, steel and cement.

3.4.22. In order to encourage the manufacture of standardised building components and making them competitive, the existing system of taxes and levies on such components and material will be rationalised.

3.5 Role of Subsidies

3.5.1. Even the creation of well functioning land and housing markets is not always sufficient to ensure that shelter is affordable for the poor and specially disadvantaged households. To deal with the problem of affordability for the very poor households in urban and rural areas, a properly structured and graded system of subsidies will be needed in order to bring down the cost of shelter. The subsidy can assume different forms:-

(a) In an integrated land development project like the World Bank Project in Madras, the element of cross subsidy is built into land pricing for the poorer households with uniform interest rate for all income categories. In Bombay the plot price varies from Rs 60 to Rs 600 per square metre.

(b) Capital subsidy is hardly effective for individual cases or small plots or for shelter upgradation or rural housing and is quite difficult to administer. An alternative system with differentiated interest rates along with ceiling costs for different income groups is being operated by HUDCO. It is found not only less burdensome on the poor households but also equally viable.

(c) For very poor households front-end subsidy can be provided as in the case of Indira Awas Yojana (IAY) and shelter upgradation in urban areas under Nehru Rojgar Yojana (NRY).

(d) Cost of shelter for the poorer households can be reduced by ensuring access to low cost building materials & components and forest resources. It is particularly relevant for rural households outside the monetised system and for informal settlements.

3.5.2. Considering the varying shelter situation and differing needs of the poorer households, a mix of approaches in administering subsidy will be more purposeful and efficient

3.6 Building materials and technologies

3.6.1. Availability of building materials and appropriate technology is crucial to the growth of housing. Increased construction activities, their

dependence on traditional high cost building materials and components and inadequate supply had pushed up the cost of housing. The production of some of the major building materials, their estimates of requirement during the 8th Plan taking into consideration the projected need for new housing and upgradation of old and unserviceable stocks are given in the following table:-

REQUIREMENTS/AVAILABILITY OF MAJOR BUILDING MATERIALS FOR 8TH FIVE YEAR PLAN (1990-95)

Sr. No.	Material	Unit	For 217.7 lakh dwelling units			
			Requirement	Quantity Available	Shortage	Remarks
1.	Cement	Million tonne	113.98	114.93	17.05	6 per cent growth rate has been assumed. 40 per cent of total production will be available for Housing Sector
2.	Steel	Million tonne	13.94	11.24	2.70	Growth rate has been assumed as 5 per cent. Availability for whole construction industry is 56 per cent out of which 20 per cent has been taken for Housing Sector.
3.	Bricks	Million	286,496	231,598	54,898	A growth rate of 3 per cent has been assumed per annum for only clay bricks. 80 per cent of total production is expected to be available for Housing Sector.
4.	Aggregate	Million cu.m	555.94	270.35	285.59	The growth rate per annum has been assumed as 6 per cent and availability for Housing Sector has been taken as 40 per cent of total production.
5.	Timber	Million cu.m	29.09	15.75	13.34	2 per cent growth rate has been assumed for timber during 8th Plan on the basis of current availability of 3 million cu. m. 40 per cent of total production is expected to be available for construction.

3.6.2. While shortages in cement and steel can be overcome, the shortages in aggregates and timber will be severe. In the rural areas the problem is serious particularly for the rural poor because of decreasing access to bio-mass which will continue to be predominant form of building material in rural areas.

3.6.3. Given the tremendous task of providing shelter to all within a short time frame and making them affordable the country has very little option but to rely increasingly on low cost locally available building materials and components and simple appropriate technology. R & D efforts have led to laboratory development of various low cost, low energy consuming building materials using various agro-forestery, industrial mining wastes. There is considerable potentiality for their commercial production and large scale application. The following table will indicate the quantity of waste materials available which can be used for building materials and components:-

ANNUAL AVAILABILITY OF SOME AGRO-INDUSTRIAL WASTES

Sr. No.	Name of Bio-mas	Availability million tonnes
1.	Fly-ash	25
2.	Coal washery rejects	2/3
3.	Rice husk	25-30
4.	Red mud from Aluminium Plants	2
5.	Basalt fines	
6.	Blast furnace slag (From Iron & Steel Industry)	8/9
7.	.By-product Gypsum (Phospho gypsum) (From Phosphoric acid and hydro industry)	5
8.	Mine tailings	6
9.	Bamboo	9.5
10.	Jute Stalk	3.0
11.	Coconut Husk/Coir waste	1.5
12.	Saw Mill waste	2.0
13.	Coconut Pith	1.0
14.	Groundnut Husk	12.5
15.	Banana leaves & Stalks	0.20

3.6.4. An integrated approach is required in the transfer of technology and commercial production of newly developed building materials and

their marketing.

3.6.5. A package of measures, envisages the following:-

1. Arrangements for selection and promotion of proven technological advances.
2. Promotion of manufacture of building materials and components through financial assistance, technical help, fiscal concessions.
3. Support to extensive network of Building Centres to be run by autonomous/non-Govt. societies with HUDCO and State Govt. support for extension of technology, upgrading skills and more employment.
4. A dedicated organisation is being set up for technology search, application and promotion concerning the following areas:-

(a) Building Materials,
(b) Selective approach to technology,
(c) Marketing/outlet through building centres and
(d) Franchising of the building centres and
(e) Development of appropriate standards.

5. Employment potential of building materials industry and construction of housing should be fully exploited in order to achieve reduction in the cost of building materials through innovative and indigenous technologies.

3.6.6. Measures will be taken to strengthen linkages with R&D institutions for the adoption of innovative production processes and for modernising their manufacturing units.

3.7 Addressing Constraints & Legal framework

3.7.1. Appropriate amendments to existing laws and regulations would be considered in consultation with the State Governments for creating an enabling environment for housing activity and for guaranteeing the access of the poorer households in urban and rural areas to shelter with security and dignity. The measures in this regard will cover the following:-

i) For conferring tenurial rights over homestead land in the rural areas on tenants on which his dwelling house or farmhouse stands and over which he has no proprietary rights, provisions in the Land Reforms Act need to be made on the lines of Kerala legislation. Suitable amendments or provisions be made in the Land Revenue Codes of the State for giving tenurial rights over leaseable wasteland, homestead land of the community/State if the tenant, landless labour, SC/ST and the poor have constructed huts or dwelling units and are in long possession of the same. Action is needed also to preserve the access of the rural households to biomass resources.

ii) Government should review the slum legislations to facilitate improvement programmes in squatter settlements, speedier acquisition of private land under slums and grant of tenure to residents of improved slums. Steps should be initiated to modify planning standards to make legal shelter more affordable to the poor. While National Building Code IS-8888 can be a general guide, State Governments/local authorities should undertake a realistic review of Master Plan Standards, land use plan and regulations, building bye laws, infrastructure standards to determine the minimum norm which are compatible with both health and safety as well as the means of the poor. The town Planning Laws should be amended to permit realisation of the objective of tenure for slum dwellers and shelter

iii) At present, the land acquisition proceedings are seriously delayed due to legal wrangles and administrative delays. There is also general resistance from the land owners against such acquisition due to a feeling of inadequate compensation and delay in payment. The NCU has recommended the amendment of the Land Acquisition Act to enable speedy possession and prompt payment of proper compensation. It has proposed that the Scheme for utilising the land must form part of the notification of intention to acquire and the Act should delink the process of possession under the Land Acquisition Act from payment of compensation. The Land Acquisition Act can also provide for negotiated compensation. A model law for land acquisition on this model can be devised and considered for adoption by all state agencies with local variations.

iv) Review and amend laws and regulations relating to town planning, development control and building, with emphasis on the optimum use of land, concern for the specific local circumstances, reduction of land development cost and encouragement to innovative design and low cost housing.

v) Amendment of the Urban Land Ceiling Act.

vi) Amendment of Rent Control Laws may be considered with the objectives of:

(a) protecting existing tenants from arbitrary eviction.

(b) periodic rental increase in line with cost of living index.

(c) delinking of non-residential tenancies from residential.

(d) offering of fiscal and other incentives for new rental construction for individuals and organised employers.

(e) realistic valuation of property for improving the tax base of local bodies.

(f) enabling tenant cooperatives to secure ownership rights of old premises in the interest of housing stock.

Meanwhile, the Delhi Rent Control Act, 1958 was amended in October, 1988.

The Delhi Rent Control Amendment Act is being evaluated. The Ministry, in December 1988, wrote to all the States and UTs suggesting the desirability of amending the respective Rent Control Laws on the lines of the Delhi Rent Control (Amendment) Act, 1988. A major reason for withdrawal of vacant premises from the rental market is the difficulty faced by landlords in securing possession of the house for self-occupation.

The Supreme Court in a judgement has observed that the Supreme Court and the High Courts should be relieved of the heavy burden on rent litigation and the idea of setting up a National Rent Tribunal on All India basis should be examined. States and UTs are being consulted for setting up of the National Rent Tribunals.

vii) Housing cooperatives occupy unique position in facilitating access to housing and land, the shortage of which is quite severe in urban areas particularly in metropolitan cities. The access to housing finance through a group guarantee and management of services are easier under the cooperative societies. The Housing Cooperatives are, however, registered under their respective State Cooperative Societies Act which are archaic and cause various operational difficulties. In view of the distinctive nature of functioning of housing cooperatives which distinguish them from other types of cooperatives, there is a need for either for a special legislation or provision. Federation of India (NCHF) has drafted a model chapter covering various areas of definitions of housing societies, contractual relations between the members and the society, creation of special reserves, sinking fund, registration of transfer and exchange of flats in housing cooperatives, etc. The existing legislations require suitable amendments to make them flexible and progressive.

vii) There is an ever growing tendency to construct multi-storied flats and apartments on ownership basis, consequent upon shortage of land in urban areas. To protect the transferable and heritable interests of apartment owners, management of common areas and ban on creation of encumbrances against property as a whole, legislation on the lines of Apartment Ownership Act in a number of states is needed.

ix) Laws relating to the regulation of the activities of developers and builders are needed on the lines of the Maharashtra Ownership Flats (Regulation of the Promotion of Construction, Sale, Management and Transfer) Act to safeguard the interest of public who are otherwise liable to be cheated by unscrupulous promoters. Fiscal and other measures are needed to control speculation in real estate and to channel black money into legitimate housing activity.

x) Legal changes related to housing finance are necessary such as:-

(1) Amendment of Transfer of Property Act (TPA) to recognise the right of flat owners in a cooperative for the purpose of creation of mortgage.

(2) Amendment to civil procedure code to simplify the recovery proceedings or mortgage debts through foreclosure and sale of property.

(3) Standardisation of the procedure and documentation for primary mortgage.

(4) English mortgage recognised by the Transfer of Property Act which provide for right of private sale without the intervention of the court, and the right to appoint receiver, to be made universally applicable.
(5) Banks and housing finance institutions to be enabled to create equitable mortgages by taking deposit of title deeds and be given the power of sale without the intervention of courts.
(6) Even though there is Central Indian Stamp Act applicable for entire India, each State has enacted a separate Stamp Act in a bid to increase State revenues. The Stamp Duties vary considerably form State to State and is as high as 14 per cent as to be confiscatory.
(7) As per the State Stamp Act, the documents executed by Housing Cooperatives attract Stamp Duty unless specifically exempted by special order in this behalf. There is considerable variation in the policy and procedures followed in different states/Union Territories. The rationalisation of stamp laws is needed with due regard to the State's interests in raising revenues, reduction of financial burden on acquiring a house and the need for maintaining the record of titles and encumbrances through systematic registration of documents.
(8) Procedure for investigation of title to be simplified and made inexpensive and the question of installing the Torrens system may be considered.
(9) Simplification of procedure for registration of documents and expeditious release of registered documents.
(10) Instead of registration of deeds or interest in the property, alternative approaches like registration of title to property to be explored so that a certificate of registration of title protected by statute can be easily made available.

In so far as the enactments come under the purview of Parliament, the Centre can initiate to a State and the amendments in the relevant State Legislations will require consideration by the State Governments.

3.8. Role of Government and public agencies

3.8.1. It would be Government's endeavour to guarantee conditions under which different sections of society, specially the poor and the disadvantaged, will be able to secure adequate housing in a healthy environment. It would also integrate the pursuit of housing programmes by different agencies and households with the requirements of environmental preservation. It would encourage the effective participation of the community, cooperatives and legitimate private agencies in the planning, financing, implementation and management of housing programmes in urban and rural areas and safeguard the interest of the poorer households and women in this process. The Central and State Governments will devise measures for strengthening the financial and organisational capacities of local bodies through proper devolution of powers and finances, to be coordinated at the level of the district and city region. It would ensure a more open system of access to information on all housing programmes and policies and by a flexible response to their initiatives. The voluntary agencies would be fully supported in their efforts to organise the community for neighbourhood action to upgrade shelter, employment and basic services.

3.8.2. Reorienting Public Bodies

The activities of the public agencies and local bodies would be reoriented to facilitate housing activities of the community and the poorer households in various ways. Such restructuring of the housing organisations would call for the diversifying and strengthening the technical and managerial cadres with greater representation for persons with architectural and community extension orientation. The Government would also take steps to devise special educational courses to turn out professionals required for the planning of habitat and human settlements.

3.8.3. Private and Community Sectors/Cooperatives

i) The private and community sector including the cooperatives and groups of individuals will be encouraged to take up housing construction within the frame work of housing policy. The community will be involved in the formulation of neighbourhood level programmes.
ii) The community based groups and neighbourhood committees will be given responsibility for implementation of upgradation/construction schemes both in rural and urban areas.
iii) Setting up of cooperative societies for various shelter related activities will be encouraged in urban and rural areas for different income groups.

3.8.4. Housing activity and employment

Conscious efforts would be made to integrate the rural and urban housing activity with schemes for employment creation and skill development. Housing construction techniques with higher labour component would be promoted. The informal sector enterprises would be assisted by facilitating the expansion of the work place alongwith houses, and by promoting neighbourhood level material centres and trades, linked to shelter upgradation and construction. This would be supported by a network of Building Centres and the infrastructure set up for the urban employment and credit programme.

4. Investment plan

4.1. The overall magnitude of the housing problem confronting the country is estimated for a span of 20 years from 1981 to 2001, to be 233 lakh dwelling units in terms of backlog and 638 lakh new dwelling units to meet the incremental housing needs of the growing population during a span of 20 years from 1981 to 2001, to be 233 lakh dwelling units in terms of backlog and 638 lakh new dwelling units to meet the incremental housing needs of the growing population during this period. The total investment required during the period 1981-2001 for both (a) removing the backlog of housing needs up to 1981 (mostly upgradation, repair and renewal) and (b) creation of new housing stocks/additional rooms, etc., for the increased number of households, was estimated at Rs 1,90,000 crore at constant prices based on 1985 cost excluding investments on infrastructure and services. After excluding estimated capital formation over 1981-90, the estimated investment over 1991-2000 at 1985 prices would be about Rs 1,40,000 crore. The dimension of the problem in terms of investment appears to be quite staggering. It is necessary to raise the real investment in housing by over 35 per cent each year in order to realise the goal of eliminating shelterness.
4.2. As against the substantial requirement of funds in the housing sector, the investment has progressively declined over the Plan period as would be clear from the following table:-

Plan period	Total investment in the economy		Total	Investment in housing		Total	Percentage of Hsg. Inv. to total Inv. in economy.
	Pub.	Pvt.		Pub.	Pvt.		
	(Rs crore)			*(Rs crore)*			
1	2	3	4	5	6	7	8
1st	1,560	1,800	3,360	250	900	1,150	34
2nd	3,650	3,100	6,750	300	1,000	1,300	10
3rd	6,100	4,300	10,400	425	1,125	1,550	15
4th	13,655	6,980	22,635	625	2,175	2,800	12
5th	31,400	16,161	47,561	1044	3,636	4,680	10
6th	97,500	747,101	72,210	1491	11,500	12,991	7.5
7th	168,148	180,000	349,148	2,458	29,000	31,458	9
8th				7,750	69,746 (proposed)	77,496	

4.3. In contrast, the investments in other priority sectors of the economy i.e. agriculture, industry, etc., have grown steadily and substantially over the Plan periods. The comparative decline of housing investment and supply constraints in land has led to the present shelter crisis.

4.4. To tackle the serious dimension of the housing problem confronting the country, the immediate need is to reverse the declining investment trend. It is only by stepping up the investment at once in the shelter sector and urban infrastructure and increasing it at a steady pace thereafter, and taking other related measures, there can be hope of a significant change in the housing situation and improvement in the quality of environment of settlements. In line with past trends, the proposed investment of Rs 77,496 crore over 1990-95 should be aimed out of which 10 per cent should be in the public sector, and reflected in central and state budget. The immediate goal should, therefore, be to double the investment in the public sector during 1990-91 and create conditions for increased flow of funds in the private sector. The share of financial institutions and Provident Fund should go up to 20 per cent of the annual investment over 1990-95.

Further, the state should provide necessary support in terms of making available land, infrastructure, adequate supply of building materials, access to local resources, helpful institutions and regulatory framework to create an appropriate climate so that the desired level of capital formation in housing results through the efforts of private sector, household sector both in informal settlements and rural areas.

4.5. The estimated level of capital formation in housing is around Rs 10,000 crore during 1987-88. It is well within the realm of possibility to achieve the level of investment both in the public and private sector of over Rs 15,000 crore per annum during the 8th Five Year Plan and assure corresponding availability of land and resources. This will trigger a physical growth rate of housing construction and upgradation which will meet the shelter needs of the country over a defined time with specific focus on the disadvantaged groups and poorer households in dire need of shelter.

5. Action Plans at State level

5.1. An Action Plan relying on enabling principle necessitates due representation of the shelter sector in the action programmes of all key Ministries involved directly and indirectly in the problems of human settlement. This will be built into the macro-level planning at different levels.

5.2. Housing is a State subject. Giving the wide variations in housing needs and resource endowments in the country, short-term and perspective plans of actions have to be formulated by the States/UTs taking into account the following factors:

(a) there must be complete estimate of the number, type (economic category), and standards of dwelling to be constructed or upgraded both by the private and public sector and the units to be offered in the rental market.

(b) efforts should be made to earmark resources for the private and public sectors, and if possible the number and type of dwelling units to be constructed by each sector in States/UTs.

(c) Since in the NHP, a time-frame has been provided, i.e. 2001 A.D., to accomplish the goals, it requires geographical and sector projections of State/UT-wise requirement of housing including forest resources and conventional materials.

(d) There should also be separate projections for rural and urban housing needs, including the resources to be earmarked for each sector.

(e) The Action Plan would distinguish shelter needs of those in possession of a plot and desire to construct dwelling unit, those who are totally shelterless, those who can afford to acquire a built - up unit, those in need of repairs and renovation/extension of the dwelling units, and those in need of additional amenities. It should thus work out the desired product mix and the resources required in order to provide shelter of minimum standard. The Action Plans would be

formulated for each State/UT within a time frame of 6 months for time bound implementation by state agencies and built into the Five Year Plans.

6. Conclusion

The draft policy statement, howsoever comprehensive, cannot reflect each and every strand of opinion and the variegated and location-specific needs in a country of sub-continental dimensions with differing socio-cultural pattern, life style and perceptions of shelter. The present policy statement requires broad based National Debate with inputs from States/UTs in federal set up. It calls for interaction with various expert groups, professional bodies, Non-Governmental Organisations before it can be given the final shape of a National Policy on Housing for this Decade.

REVIEW ARTICLE*

SAVINGS OF THE PRIVATE CORPORATE SECTOR

Ajit Karnik

The Indian economy experienced a peculiar transition from 1973-74 onwards. During the 13 years prior to this year (1960-61 to 1972-73) the gross savings rate had fluctuated between 13 per cent and 17 per cent. However, in 1973-74 the savings rate shot up by about 3 percentage points, peaked subsequently at a level of 24.7 per cent, before stabilising to an average level of about 21 per cent per annum.

There has been no dearth of studies addressed towards explaining the savings behaviour during this period. In particular, attention has been focused on the curious juxtaposition of a high savings rate with a low overall growth rate. Studies have also been directed towards the sectoral composition of savings, notably the household sector. The household sector accounts for an overwhelming proportion of domestic savings: the share of this sector has risen consistently and was as high as 91.4 per cent at the end of the Sixth Plan. Savings of the public sector have also been under scrutiny, especially in the context of the fiscal problems facing the Indian economy.

In all the flurry of literature in this area what has gone virtually unnoticed, certainly it has been neglected, has been the behaviour of savings of the private corporate sector. One reason for this neglect could well be the very low contribution of private corporate sector savings to gross savings. Of course it is possible to make the counterpoint that this should rather have been a cause for substantial investigation. Even more surprising has been the dearth of literature on the stagnancy of private corporate sector savings rate in a situation of rising overall savings rate. In the circumstances the book under review is most welcome.

The book has twin objectives: one to examine the differing estimates of private corporate sector savings and evolve a methodology to accurately estimate the exact level of savings; and two, to offer an explanation for the stagnancy of the private corporate sector savings rate.

Objective One: Estimating Private Corporate Sector Savings

There are two official estimates of savings of the private corporate sector in India: the National Accounts Statistics of the Central Statistical Organisation (CSO) and the Report on Currency and Finance of the Reserve Bank of India (RBI). Both CSO and the RBI use a similar concept of private corporate sector savings. As per the CSO it is defined as retained profits plus increase in tax reserves, net of increase in advance tax payments; the RBI on the other hand adds to the estimates of retained profits changes in tax provisions. However, there is some difference in the coverage of companies by the RBI and CSO especially in the inclusion of branches of foreign companies. Even after adjusting for this difference, the estimates of private corporate sector savings by the two institutions differ significantly as shown in Shanta (1991).

In this context it is important to point out that the divergence between the CSO and RBI estimates of private corporate sector savings will disappear after the introduction of the new national accounts series. Prior to the introduction of the new series there were differences in the methodology and the data base used by the two agencies. Now however these differences have been sorted out and the agencies have reached an agreement on a uniform methodology and data base [CSO, 1989, p. 217]. It has also been decided that responsibility for the compilation of estimates of the savings of a specified sector would vest with only one agency. In particular the RBI is charged with the task of estimating the savings of the private corporate sector.

Definitionally, as well, a change has been introduced in the concept of private corporate

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* *Trends in Private Corporate Savings*: N. Shanta, Centre for Development Studies, Trivandrum, 1991.

sector savings. As far as non-government, non-financial public and private limited companies are concerned their savings are now estimated as equivalent to their retained profits as against the sum of retained profits and tax provision, net of advance tax paid as in the earlier series [CSO, 1989, p. 217].

While the changes introduced in the new series of the CSO would produce uniform estimates of private corporate sector savings from the mid-eighties onwards the discrepancies in the estimates of the two agencies for the earlier years will remain. As stated before, even after adjusting the RBI estimates to make them comparable to those of the CSO significant differences remain. The explanation for this is to be found in the method followed for blowing up the sample data on the basis of paid-up capital coverage. In going from the sample to the population both agencies use Company Law Board population estimates of paid-up capital. The difference lies in the method of blowing up. The CSO blows up for each sector with respect to the total population paid-up capital of both medium and large, and small public limited companies and does not derive blow-up factors for each sub-sector based on total population paid-up capital of that specific sub-sector. The RBI on the other hand uses separate blow-up factors for each sub-sector.

Thus while the difference in the blow-up factors is crucial for explaining the discrepancies between the two series even more important is the validity of using blow-up factors on the basis of paid-up capital alone. The RBI Working Group on Savings has questioned the wisdom of using paid-up capital as a blow-up factor since it assumes that the ratio of retained earnings and other aggregates to paid-up capital is the same for all companies whether in the sample or otherwise. Accordingly it has recommended that paid-up capital be replaced by other blow-up factors such as gross fixed assets or sales [RBI, 1982].

In view of the deficiencies in the blowing-up of private corporate sector savings from the sample estimates, Shanta (1991) has proposed an alternative approach. This approach assumes that sales, profits, reserves, etc., of the companies brought in to enlarge the sample at the end of every quinquennium, change in exactly the same direction and at the same rate as the value of the respective variables in respect of the old sample during the previous five years. This approach can then be employed to adjust all values of, say private corporate sector savings, over the entire period under consideration. One drawback of this approach would be that the data would be in a constant state of flux, with the quantum of private corporate sector savings being adjusted and re-adjusted every five years when census figures become available. To overcome this difficulty of constant changes in data it is suggested that once a census figure becomes available it is sufficient to adjust only the following five years to it. Say, if census figures for 1976-77 become available then one adjusts only the series 1976-77 to 1980-81 to this census data; 1980-81 to 1985-86 series to 1980-81 census data and so on.

On the basis of the new method alternative estimates of private corporate sector savings have been estimated and these show the profile of private corporate sector savings to be much lower than those obtained by the CSO and the RBI. Not only are the magnitudes smaller but the rates of growth also differ substantially. The rate of growth using CSO estimates is 10.7 per cent per annum; using RBI estimates it is 9.3 per cent per annum; using Shanta's (1991) estimates it is 7.5 per cent per annum.

The new estimates of private corporate sector savings does not however change the basic scenario; low private corporate sector savings, declining trend and falling share in total savings. It is not clear from the exercises of the paper whether the share of private corporate sector savings in total net domestic savings or in total gross domestic savings changes at all. Since the new estimates of private corporate sector savings are lower and since these are a component of total savings, total savings would also decline. Hence as a proportion of the total, private corporate sector savings may well remain unchanged. It does not seem from Table 4.2 in Shanta (1991)

that net (gross) domestic savings have been adjusted to reflect the new estimates of private corporate sector savings (p. 45).

Objective Two: Analysing Private Corporate Sector Savings

Important as the first objective of Shanta (1991) is, it is not as challenging and interesting as the second objective. This is not to deny the need for accurate estimates of private corporate sector savings or any data series for that matter. Any attempt to improve the quality of data in the Indian context needs to be welcomed, though in spite of the efforts in the book under review we will continue to be firmly stuck in second best situations. The new methodology may well be superior to that employed by CSO and the RBI, yet it is still a prey to some crucial assumptions which renders it vulnerable to at least some of the criticisms directed at the CSO and RBI. Moreover the author has not indicated whether after the introduction of the new (base 1980-81) series by the CSO, the methodology of estimating private corporate sector savings has changed. We know that the discrepancies between the CSO and RBI estimates will disappear since only the RBI is charged with estimating private corporate sector savings. What approach the RBI will take in its estimation exercises is not clear. The decision that only one agency estimate private corporate sector savings was taken consequent to the recommendations of the RBI Working Group on Savings which also suggested the replacement of the use of paid-up capital as a blow-up factor by more appropriate measures. It might well be reasonable to expect that this recommendation of the Working Group will be incorporated in the new RBI methodology.

From an analytical point of view the far more interesting problem is examining the reasons behind the sluggish performance of private corporate sector savings in a regime of increasing savings rate. This analysis remains an important goal whichever estimate of private corporate sector savings one uses. Since all the three estimates of private corporate sector savings, viz., those of CSO, RBI and Shanta (1991), show similar behaviour, the analysis of this behaviour would by and large be the same. Unfortunately it is in this crucial aspect of analysing the behaviour of private corporate sector savings that this book does not offer anything startlingly new. Many of the issues raised can be found in the literature [see, Majumdar, et al., 1980, Rao, 1983 and Shanker and Nayak, 1983]. One would have been happy to see some econometric evidence adduced in respect of the factors listed as explaining the behaviour of private corporate sector savings.

Shanta's (1991) analysis of private corporate sector savings is addressed towards two questions: 1. Why is the share of the private corporate sector savings in total domestic savings so low?, and 2. Why did this share fall during the high savings phase of the economy?

The private corporate sector in India has been experiencing a declining share in the total net value added. This share of the non-government non-financial companies has come down from 8 per cent in 1960 to 5 per cent in the early eighties. Of course its shares in net value added in total manufacturing and in organised manufacturing is much higher at 29 per cent and 44 per cent respectively in 1982-83, though even these shares have declined from the levels experienced in the early sixties. The decline in the share of private corporate sector in manufacturing could be due to other sectors in manufacturing growing much faster or to the declining trends in the private corporate sector itself.

Dividing the net (gross) value added in the non-financial sector between non-government and government companies one finds that the share of the former in net value added has fallen from 95.9 per cent (1960-61) to 75.4 per cent (1977-78); as far as gross value added is concerned it has declined from 95.7 per cent to 73.9 per cent over the same period [Shanker and Nayak, 1983]. Concomitantly the share of the government companies in net value added increased by six times over the same period and by about as much in gross value added. The annual rates of growth recorded by the net and gross value added by government and non-government companies makes interesting reading as seen in Table 1.

TABLE 1. ANNUAL RATES OF GROWTH IN GROSS AND NET VALUE ADDED AT CURRENT PRICES BY TYPE OF COMPANIES

(per cent)

	Gross value added		Net value added	
	Non-Govt. Companies	Govt. Companies	Non-Govt. Companies	Govt. Companies
1965-66 over 1960-61	13.4	32.6	13.4	30.1
1968-69 over 1965-66	2.0	23.5	1.5	17.1
1973-74 over 1968-69	12.0	37.1	12.1	42.7
1977-78 over 1973-74	9.0	1.0	9.2	1.5
1977-78 over 1960-61	9.8	24.0	9.8	23.8

Source: Shanker and Nayak, 1983.

In spite of a very low rate of growth experienced by government companies during the period 1973-74 through 1977-78, the rate over the entire period is as high as 24 per cent. Some of the important factors in this rapid rate of growth of government companies was the nationalisation of certain key industries in the private sector (coal is the most important of these), new government enterprises coming on stream and faster expansion of operations of existing government companies. The decade of the seventies was a period of unabashed populism and compulsive genuflection towards pastiche socialism and it is not surprising that the public sector increased so rapidly.

While the share of the private corporate sector in net value added was being squeezed by the public sector the situation within the private sector was no less bleak. Within the private sector an examination of the shares in factor incomes of corporate and non-corporate sectors is illuminating. An abstract of Table 5.8 from Shanta (1991) is given below in Table 2.

TABLE 2. SHARE OF CORPORATE AND NON-CORPORATE SECTOR IN DIFFERENT INDICES OF PRIVATE MANUFACTURING ENTERPRISES

(per cent)

Year	Net Value Added		Compensation to Employees		Operating Surplus		Profit & Dividends	
	C	N.C	C	N.C	C	N.C	C	N.C
1960-61	76	24	90	10	59	41	56	44
1970-71	77	23	85	15	66	34	56	44
1980-81	67	33	81	19	37	63	34	66

Note: C = Corporate Sector; N.C. = Non-corporate Sector.
Source: Shanta, 1991.

The 'crowding out' of the corporate sector by the non-corporate sector is clearly seen from the figures given above. Especially important is the share of the corporate sector in profits and dividends. Over a twenty years span the share has fallen by 22 percentage points; a similar decline is visible in the case of operating surplus as well. Apart from the indices listed in Table 2 the non-corporate sector seems to be growing more and more significant in terms of its share in fixed capital, value added, employment, etc. Further, the proportion of value added to non-wage income is very often higher for the non-corporate sector than for the private corporate sector. The main reason for this is the fact that compensation per employee is much lower in the case of the non-corporate sector.

Even though one can conjecture that this increase in the importance of the non-corporate sector led to a decline in the private corporate sector savings, the data does not permit us to arrive at an unambiguous conclusion. As stated by Rao ".. the fall in the share of profits of the private corporate sector is due to the continuing and significant position of the unincorporated sector in Indian manufacturing and commerce,

which is reflected inn household savings" [Rao, 1983, p. 137]. As the non-corporate sector has gained in importance the savings of the household sector, which incorporates this sector, have grown while that of the private corporate sector has languished. However it is not possible to quantify the savings of the non-corporate sector since these are clubbed together with the household sector which includes all non-corporate enterprises such as partnerships and proprietorships, individuals and Hindu undivided families. The analysis of the effects of the growth of the non-corporate sector has to be, perforce, based on conjecture, however realistic, and not on hard facts.

Shanta (1991), in an interesting bit of indirect evidence of the above phenomenon has tried to draw some inferences from the income tax data of the household sector. This data is available separately for individuals, Hindu undivided families, unregistered firms and registered firms. Even though the category of registered firms may not exactly correspond to the non-corporate sector one may use as a proxy the incomes accruing to such firms to infer the income of the non-corporate sector. The following abstract, in Table 3, yields interesting information.

TABLE 3. SHARE OF DIFFERENT COMPONENTS IN INCOME ASSESSED OF ALL NON-COMPANIES

(per cent)

Year	Individuals	Hindu Undivided Families	Unregistered Firms	Registered Firms
1960-61	75.7	8.6	3.1	12.4
1971-72	71.3	4.6	1.6	21.9
1980-81	62.7	3.2	2.3	31.8

Source: Shanta, 1991, Table 5.12, p. 69.

The share of incomes of registered firms, which category is a proxy for the non-corporate sector, has increased from 12.4 per cent to 31.8 per cent over a twenty year span. This increase has mainly occurred at the expense of the category of individuals and the Hindu undivided families. It is fair to believe that if the incomes of the non-corporate sector have grown so rapidly, its savings would have done so as well.

Focusing on the private corporate sector itself it is possible to identify numerous reasons for the dismal performance with respect to its savings. Some of the reasons that have been suggested have been, (1) fall in the share of profits in the factor incomes of this sector (2) increase in the use of loan capital and (3) taxation policy in India which discourages the accumulation of undistributed profits [Rao, 1983].

The factor share incomes in gross and net value added by the non-financial corporate sector are given below in Table 4.

The share of gross profits in the factor income shares has fallen by about 11 percentage points while that of interest has risen by 10 percentage points. This increase in the share of interest payments seems to be the result of an increase in interest rates as well as the increased reliance of companies on external sources of funds in the form of borrowed capital [Rao, 1991, ch 8]. Shanta (1991) also points to the low proportion of non-wage income to total income and a high proportion of the surplus being distributed as dividends as additional factors in explaining the low retention of profits by the private corporate sector and hence low savings by it.

TABLE 4. FACTOR INCOME SHARES IN GROSS AND NET VALUE ADDED AT CURRENT PRICES BY NON-FINANCIAL CORPORATE SECTOR

(per cent)

Year	Compensation to Employees	Interest	Gross Profits
1960-61	56.0 (63.1)	4.7 (5.3)	39.3 (31.6)
1968-69	56.7 (62.3)	12.3 (14.5)	31.0 (18.5)
1977-78	56.8 (65.2)	15.0 (17.2)	28.2 (17.6)

Source: Shanker and Nayak, 1983.

Two other factors have also been mentioned in the literature as being important in explaining the levels of private corporate sector savings. These are, one, corporate taxation in India and two, the role of inflation in generation profits in the private corporate sector. As stated by Rao "...our taxation policy .... discourages the accumulation of undistributed profits in companies and corporations" [Rao, 1983]. In fact Lall *et al.* have found in their empirical study that a 1 per cent increase in the corporate tax rate reduces resource mobilization by 1.3 per cent. Interestingly, they have also found that a 1 per cent increase in the corporate tax rate decreases the equity to debt ratio by 2.7 per cent [Lall, *et al.*, 1982]. Moreover, if one remembers the analysis of Harberger one can conjecture that the increasing burden of taxation would lead to a flow of capital from the private corporate sector to the non-corporate sector [Harberger, 1962]. This is in a sense borne out by the rapid growth of the non-corporate sector over the period under consideration.

The role of inflation in determining private corporate sector profits and hence savings has received scant attention in the study of Shanta (1991). As Majumdar *et al.* point out that when the inflation rate was as high as 25 per cent per annum in 1974-75, the profits of the corporate sector rose significantly. Concomitantly, the savings of this sector increased form Rs 381 crore in 1973-74 to Rs 593 crore in 1974-75 [Majumdar *et al.*, 1980]. Lall *et al.* have estimated that for a 1 per cent increase in the price level resource mobilization increased by 0.91 per cent [Lall *et al.*, 1982].

It is in the aspect of investigating the factors underlying the profitability of private corporate sector that one would have liked to see a far more rigorous analysis from Shanta (1991). The disappointment is all the greater because this particular part of her study is certainly amenable to an econometric investigation. Confining the analysis at the level of discussing changes in ratios over a given span of time seems like an opportunity lost. This is so especially because the author had evolved a methodology for overcoming the lacunae that exist in the data that is available for studying the private corporate sector. My criticism on this score should in no way detract from the merit of the entire study by Shanta (1991): the criticism is really in the nature of a regret at what could have been. But then, perhaps, one must leave something to be accomplished tomorrow.

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Book Review

Bipan Chandra, *Ranade's Economic Writings*, Gyan Publishing House, New Delhi, 1990, Pp. XC+461, Rs 450/-.

This collection of the selected writings of Ranade brought together with an editorial preface (Introduction) appraising Ranade's thoughts is a useful publication because Ranade's writings have been unavailable in the market for quite a long time and this book meets the need at least partially. The general editorial effort and the long introduction (90 pages) to take stock of and appraise Ranade's thoughts, however, leaves much to be desired. In fact, both these are quite unsatisfactory.

The compilation of such a work and the task of appraising the thoughts of an eminent personality of a century ago is always difficult and requires great effort. In India it is even more difficult because of the lack of bibliographical services and the general paucity and mis-management of printed material. The appraisal of the thoughts of a personality of the past requires an effort to enter into the spirit of his times and know the history of those times with reference to the locale intimately. The appraisal also needs to be objective and free as much as possible of ideological preoccupations of the appraiser. On all these counts Bipan Chandra does not make the grade.

To begin with he does not make any effort to compile a complete bibliography of Ranade's economic writings. He only prints the generally known writings and proceeds to list those that were omitted 'because of lack of space or their non-availability' (p. v). He has little to say as to how this omission does or does not detract from the understanding of Ranade's thoughts on economic matters as a whole. Nor does he give the reader any idea of what thoughts these omitted writings contained or any general idea about them. To go into details, he states that 'Article number 15 in this Volume, 'A Protest and a Warning Against the New Departure in the Land Assessment Policy' is incomplete since its last nine pages were missing from the Journal's issue available to me'. (p. vi). This is a lame excuse because these missing pages are available in the copy of that Journal in the Servants of India Society's library in Pune and from which library Bipan Chandra got some of the pieces in this book xeroxed through Sulabha Brahme as he acknowledges in his preface. A little effort and a little search would have enabled him to fill this gap.

He could have easily told the reader that the non-included *Revenue Manual of the British Empire in India* (1877) was a full book in itself and contained only a detailed description of the revenue system in India and no particular reflections of Ranade. So it was now mainly of historical importance and its omission is justified. Same perhaps could have been said about Ranade's Note of Dissent to the Report of the Finance Committee (1886). The omission of "A Note on the Decentralization of Provincial Finances" (1894) consisting of five articles could have been justified (if Bipan Chandra had tried to know) by pointing out that it is not fully Ranade's work as the last article was written by B. G. Tilak, because he had then wrested the management of the Poona Sarvajanik Sabha from the hands of Ranade and wanted to demonstrate that others could also write articles of the same calibre as Ranade. The omission of the three articles on "Plea for Protection: Sugar Industry (1899)" seems hardly justified as they were almost the last of the published writings of Ranade before his death. If they were omitted for reasons of space there are a couple of items in the present collection that need not have been included, for instance Articles 24 and 25, to make room for them.

The omission of "Lectures on Trade and Commerce" (1872) is mainly because it is in Marathi. But it is a vital omission from the point of view of the editor because the argument contained in them occupies an important place in his total appraisal of Ranade's thoughts. He refers to it several times usually quoting secondary sources, which are, as I show below, many times misleading. I am sure that he has not at any time seen the original lectures or made any attempt at acquiring a correct understanding of what exactly they contained through somebody knowing Marathi. The lectures are available in printed form today because they were reprinted and published by the Gokhale Institute of Politics and Economics, Poona, in 1963 and I wrote a rather lengthy preface to it. My guess about the editor's

perfunctory and casual acquaintance with these lectures is confirmed by the outright mistakes he makes in commenting on their contents.

(There is another article in Marathi, of even an earlier date, which Ranade wrote on the population problem in India. There he analyses the tendency of the Indian population to increase unbridled, draws attention to the adverse consequences that follow from these and urges the need for moral restraint and change of social habits. This article was printed and published in 1864 and seems to be almost one of the first published articles of his. This article is also available today because it was reprinted in *Arthasamvad* (Vol. I, No. 4, 1978), the quarterly Journal of the Marathi Arthsastra Parishad founded in 1977. Bipan Chandra, of course, cannot be expected to be aware of it.)

I list here a few mistakes of this type. Bipan Chandra regards the favourable attitude of Ranade to foreign capital investment in India as one of his significant failures in understanding of the true character of the colonial state in India. According to him in his 1872 lectures Ranade had said that foreign capital was of not much use to India but later he reversed his position and favoured foreign capital in contrast to other Indian nationalists like Nowroji and G. V. Joshi who opposed the intrusion of foreign capital in the Indian economy (p. lxxxv).

The fact is that Ranade's 1872 lectures do not contain any such view. The book is here with me. I do not find any such thing there. There Ranade praises the foreign capital investment in plantations of tea, coffee and indigo and remarks that though their profit is taken away they provide a good deal of employment and business to our people. He, however, points out that the foreign capital invested in Indian railways upto that time was not such an asset because the railways were earning a profit of about 3.5 per cent but had to pay the guaranteed interest of 5 per cent on it. The capital was of no use because it was not producing a profit but actually a loss. Possibly this has been misconstructed or misunderstood to mean that his view was that foreign capital was not of much use to India. In fact, Ranade was not against foreign capital from the beginning to the end, though he was aware of the bad consequences that it might lead to or was actually leading to. Perhaps it was for him a Hobson's choice. If foreign capital had not come in, or was opposed, there would not be the expected development of resources in the country. He must have thought that it was better to have development with foreign capital with the associated evils than not have development at all [Ranade 1963 Edition, Pp. 21-22] .

Another mistake Bipan Chandra makes about the contents and effects of the 1872 lectures is about the Swadeshi movement. On p. xxx he avers that Ranade's 1872 lectures "popularised the idea of Swadeshi.... These lectures so inspired the listeners that several of them including Ganesh Vasudev Joshi (Sarvajanik Kaka) took a vow to wear and use only Swadeshi articles". This is just wrong and only shows that Bipan Chandra does not intimately know the economic and social history of Ranade's times. Sarvajanik Kaka took the oath of Swadeshi in 1869, almost three years before Ranade delivered his lectures. Joshi did not derive his inspiration for Swadeshi from Ranade's lectures. If at all, the process would seem to be the other way round.

A third example may be cited. Bipan Chandra quotes with approval from the secondary sources, the statement that in his 1872 lectures Ranade declared that "of the national income of India more than one-third was taken away by the British in one form or another". (p. xxvi). This is incorrect. What Ranade said was the Home Charges amounted to a third of the income of the Government of India [Ranade, 1963, p. 5]. The authors of the secondary sources were ignorant about the distinction between these economic categories. Hence the need to go to the original.

Many others can be cited but let me now move on to other topics.

In sketching Ranade's thought system and paying his tribute to him Bipan Chandra provides the intellectual background of Ranade's times and then highlights Ranade's contribution. He writes:

"British colonialism in India was fully structured during the 19th century. Indian economy was integrated with the British and world

capitalist economy in a subservient position and India became a classical colony. Early 19th century Indian intellectuals took note of the many negative features of British rule. But ignoring these features and swallowing their patriotic pride and feelings, they supported British rule in the hope that Britain, economically the most advanced country of the world, would transfer its advanced science and technology and production techniques, its fast growing capital and its capitalist economic structure, organisation and enterprise to India thus ushering in the industrial revolution and the development of its agriculture and industry. It was this potentiality of creating a modern industrial India which made many of them acclaim British rule as 'providential' for nearly 100 years and to support the British rulers during the revolt of 1857." (p. vi).

"The long term trends and the inner contradictions of colonial economy began to mature and became apparent during the last quarter of the 19th century" and the expectations of the intellectuals were belied. In examining the causes for these "they developed a powerful critique of the economic condition of India and the role of British rule in its making and of the primary or central contradictions between colonialism and the interests of the Indian people" (p. vii). They "evolved the concept of a 'modernising' economy which was not developing, that is, the concept of a colonial economy" (p. ix). However, they evolved a coherent and cohesive analysis of the character of colonial economy and its underlying forces based on a common perspective of independent economic development by the beginning of the 20th century (x). "This analysis and perspective of the tradition of such analysis were the work of a large member of nationalist economists and Ranade made a major and original contribution to the emergence of this theoretical and scientific critique of colonial economy" (p. x)

But this 'theoretical and scientific critique of colonial economy' developed by the early Indian nationalists of whom Ranade was a leading light, leaves Bipan Chandra's withers unwrung because it lacked the spark that could have been struck only on the flint of Marxian thought. He observes: "The notion of colonial economy did not emerge full blown at any particular moment. This was an unchartered field. J. A. Hobson, R. Hilferding, Rosa Luxemburg, V. I. Lenin were yet to appear in print. Karl Marx's seminal writings on colonialism in India and Irland were not available" (p. ix). Naturally the early Indian nationalists lacked the real insight into such problems.

"They also came to look on the Indian capitalists as the classes/agents or carriers of their anti-colonial programme of industrialising and developing the country. Ranade was one of the proponents of this capitalist pattern of independent economic development". (p. xii) And in a way this was natural. "Who else could have initiated the process of industrialisation? To think of socialism in the absence of modern industry and a working class would have been a pure intellectual pastime. (In any case Marx's *Capital* was not available in English till early 1890s.)" (p. xii)

Ranade, among other Indian nationalists, did not show much awareness of the class dimension of or the class division and exploitation within Indian society. Ranade had little to say about the problems and sufferings of factory and plantation labour. (p. lxxxiv).

From these remarks there is no doubt about where Bipan Chandra's heart lies and what Ranade is up against. Let us gently enter some sceptical notes. What would have happened if Marx's 'seminal' writings on India would have been available to these intellectuals in their own times? Would they have felt glad that their earlier false expectations about the industrial revolution coming about in India because of British rule, were also held by Marx though for different reasons? In 1853 Marx had predicted the coming of the industrial revolution in India because of the technical imperative of railway construction in India. He wrote "I know the English millocracy intend to endow India with railways with the exclusive view of extracting at diminishing expenses the cotton and other raw materials for

their manufacturers. But once you have introduced machinery into the locomotion of a country, which possesses iron and coals, you are unable to withhold it from its fabrication. You cannot maintain a net of railways over an immense country without introducing all those processes necessary to meet the immediate and current wants of railway locomotion, and out of which, there must grow the application of machinery to those branches of industry not immediately connected with the railways. The railway system will therefore become the forerunner of modern industry... Modern industry resulting from the railway system, will dissolve the hereditary division of labour, upon which rest the Indian castes, these decisive impediments to Indian progress and Indian power" [Marx, 1853].

Would the Indian nationalists have been glad that this prediction, like their own, had also come to nought? One is not sure. But one is almost certain that they would have been unable to see the subtle dialectic connection between this prediction in 1853 and Marx's subsequent endorsement of the economic drain from India in 1857 and again in 1881. [Marx and Engels undated, p. 143, p. 304].

They knew about socialism from others, if not from Marx, and would have gone for it had they liked it. The absence of modern industries and a working class in India would not have bothered them because Marx had already given the green light to the direct jump from the agrarian stage to the socialist stage without necessarily going through the stage of capitalism [Shanin, 1983, Pp. 95-126]. But the early Indian nationalists did not like socialism because they thought that they were experiencing it every day in Indian agriculture under the British with disastrous consequences. As Ranade wrote: "Men, who come from a country where private property in land is most absolute, develop on their arrival here a taste for Socialist Doctrines. ...While the Nationalization of land is but a Socialist dream in England and Europe, it is in full swing here, and furnishes a scientific justification for periodical Revisions and Enhancements. Status and Privilege form still the very corner stone of English Social arrangements, but here every member of society is only a mobile atom, without differences marking him off from others, so far as the state is concerned" [Ranade, 1892, p. 324]. So thinking of socialism was no idle pastime for the Indian intellectuals!

It must of course be conceded that the glad tidings that all history is the history of class struggles and that India (and other Asiatic countries) because of her Asiatic Mode of Production had no history in the proper sense before British conquest, had not possibly reached these Indian intellectuals. They also did not know that since the advent of this doctrine even the moon was not allowed to affect the tides except through class struggle!

Leaving these generalities let us see how Bipan Chandra states more precisely, what he calls 'the areas of darkness in Ranade's thought'. The main failure was to grasp the character of the colonial state in India (p. 1 xxxv). Ranade retreated from the theory of economic drain from India and came to hold that the drain was only one of the many causes of Indian poverty. And in doing this he lost the political link. As Bipan Chandra has put it in his earlier book (and to which he refers) "The central difference between the political consequences of the drain theory and those of the other theories of India's poverty lay in the fact that while the latter could to some extent and for sometime be reconciled with the existence of foreign rule the drain theory could not be" [Bipan Chandra, 1966, p. 698].

"Ranade repeatedly said that Indians should not chase after the unattainable but confine their efforts to the achievement of the possible or what the rulers would grant. By saying so, he was of course raising a tactical issue. But a basic question was involved in his understanding of what was attainable and what was not." Tariff protection he thought was not feasible but 'state policy of direct and systematic promotion of industrial development was quite feasible within the existing political structure. Missing here was the linkage between colonial economic structure of the colonial state, between colonial interests and what was possible or feasible as colonial policy, and

therefore an understanding of the basic character of the state in India as a colonial state. Others among nationalist economists and leaders did make this connection" (p. l xxxvii).

I have quoted in extenso because the argument is involved and takes further curious turns and I did not want to be unfair to the author. It is clear that the main thesis of Ranade's failure to grasp the nature of the colonial state in India is based on two proximate theses: (a) that, he retreated from the theory of the economic drain, a theory the understanding of which was necessary to grasp the true nature of the colonial state and (b) his expectations regarding the role of the state in India were naive and wrong. I will begin with the two proximate theses.

(a) The theory of the economic drain from India because of British rule was older than Ranade. It was aired by Raja Rammohan Roy (1820) and Captain Wingate (1835) even before Ranade was born. It was formulated in an extreme form by D. Nowroji around 1860s and later others contributed their might to it. By the turn of the century its hey day was over and it ceased to occupy Indian nationalists in the twentieth century as intensely and as frequently as it did in earlier years. It sort of petered out.

The theory was, from the beginning, very crude and throughout its active life and manifestation it invariably confused two balance sheets, namely, the balance of payments of India as a whole and the balance of receipts and payments in the annual revenue budget of the Government of India. Ranade confused it at places in his 1872 lectures though not in the specific place mentioned earlier and many of his calculations were wrong, as I pointed out thirty years ago in my preface to the reissue of these lectures. Ranade's retreat from it in 1890 showed only his maturity and his true liberal's creed to keep an open mind and change one's views if warranted by further study. I made this clear in my preface to the 1872 lectures [Ranade, 1963, p. 7].

Nor was the endorsement or understanding of the theory of the economic drain from India a necessary condition for the correct understanding of the character of the colonial state in India. That the drain could not be ended without ending British Raj was clearly realised by Ranade. In his 1872 lectures he observed that the tribute that India has to pay for being ruled by a foreign government has to be stoically accepted by us for the present because the termination of this tribute is far away in the future (p. 16). And considering that he was making this statement less than fifteen years after the suppression of the 1858 Mutiny, it is not surprising that he expected the end of British Raj to be far away in the future. (For the matter of that who in India in the late thirties of this century expected the end of British Raj in India in less than a decade?) Nor was the expectation of those who continued to believe in the drain theory in contrast with Ranade any different. That the 'drain' cannot be ended without ending British Raj was a realisation that did not depend upon the endorsement or otherwise of the theory of the economic drain as Bipan Chandra believes and makes a great to do with.

And then it surprisingly turns out that this is only a red herring across the trail. Bipan Chandra is after different game or after the real conclusion that he wants to derive without seeming to. For he seems to perform a *volte face* and argues that Ranade really did not retreat from the theory of the drain in 1890. His statement then indicated "a 'tactical decision' arising out of expediency and not a basic change in economic analysis or thinking" (lxxxii). In his later years Ranade did underplay the tariff and the drain questions because he thought that the acceptance of these demands were so basically opposed to colonial rule, colonial interests and colonial ideology "that the colonial administration would not accept them at least in the foreseeable future. Only an independent government could adopt them; but the struggle for independence, believed Ranade, was not yet on the agenda" (p. lxxix).

This is an astounding accusation against Ranade denying as it were the whole purpose of his life, based on a totally wrong analysis. Ranade was engaged in the struggle for the independence of India throughout his life and nobody has said otherwise except perhaps this author. When one tries to fathom the reason for this, one comes to

understand that the only meaning that the author attaches to the phrase "struggle for independence", to the exclusion of all other possible ones, is in the best Communist tradition, "to organise popular agitations and movements and political struggle around their (people's) economic demands and policies" (p. xiii). Ranade and other early Indian nationalist leaders could not bridge the wide gulf between themselves and the people. They themselves belonged to the 'middle class' and were not declassed intellectuals to become one with the masses without involving whom there could be no struggle for independence!

But this leaves Ranade and his contemporary Indian nationalists hung in the author's analytical pagoda. We were told that without realising and holding the Drain Theory there could be no proper understanding of the character of the colonial state in India and its political aspect. Ranade retreated from the Drain Theory and naturally he could not grasp that. However wrong, so for so good. Then we are told that Ranade really did not retreat from the Drain Theory but merely went through the motions to avoid starting or sharing in the struggle for political independence of India. Now, one wonders, how could he be convinced of the Drain Theory and yet not understand the foreign character of the colonial state in India as per the author's own premise? And how could Ranade's dissenting colleagues, who must have understood the character of the colonial state in India as they believed in the Drain Theory, ignore the struggle for independence, in the author's sense, because they did not start mass movements either. They also belonged to the same "class" as Ranade and also did not show much awareness of the class dimension of or the class division and exploitation within Indian society (p. lxxxiv). Bipan Chandra's definition of the struggle for independence implies that there was no such struggle in India before 1920! Strange indeed! But not really! For if India had no history in the proper sense of the term before the British conquest in the scheme of this analysis does not the absence of any struggle for independence in India before 1920 merely dialectically follow?

(b) Bipan Chandra argues that Ranade's expectations from the role of the colonial state in India were naive and unreal because he did not grasp the real character of the colonial state in India. He says: "The weakness in Ranade's understanding of the colonial state emerges clearly in his treatment of the role of the state in Indian economy. As brought out in Section VII above, while he did not regard the demand for tariff protection and the ending of the Drain as feasible, he regarded active support to industrial development by the colonial state as entirely within the realm of the achievable or the practical..... Missing here was the linkage between colonial economic structure and the colonial state, between colonial interests and what was possible or feasible as colonial policy, and therefore an understanding of the basic character of the state in India as a colonial state. Others among nationalist economists and leaders did make this connection" (p. lxxxvi - vii).

"Ranade saw the state as the representative of the public, of the collective will of society and so the national organ of the nation's will for development or as the guardian of the community. But he failed to see, or at least to articulate, that the Indian state was a colonial state and not a national state and that a colonial state was as incapable of promoting development in any basic manner as of ending the Drain or of providing meaningful or effective tariff protection against imports from Britain" (p. lxxxvii)

In taking such a view Bipan Chandra is not only ahistorical but misses completely the ambience of the times of the early Indian nationalists in the nineteenth century. While they resented foreign rule they could not ignore the benefits that India was deriving from British rule and contact, along with the bad effects it of course necessarily produced. They were conscious that their very struggle for independence originated in the freedom of the spirit and the waves of Western ideas and science that had come to them through English education which came with British rule. The benefits of British rule were not only stressed by Ranade but also by B. G. Tilak, 'The father of Indian unrest'. They could have not objectively drawn a purely black picture of colonial rule

however much they rhetorically said so. Besides they had good grounds for taking the view that they did of the colonial state in India. These can be discussed briefly.

Ranade's view of the state in India was based on two reasons grounded in history. He was aware of the colonial policy of Britain towards the Indian dependency, and he expressly declared it. (p. xvii). But inherent in that policy was an element that Ranade could not ignore in his times. This was what Adam Smith had pointed out in criticising the East India Company's policies in India. The aim of the commercial companies, like the East India Company, was frankly to exploit these territories commercially. When these companies became territorial entities and shed their merchant characteristics and/or were transferred to the metropolitan powers, the latter had to adopt something of a duality of functions. Adam Smith pointedly brought out the contrast between colonial administration by Home government and by commercial companies. While the latter were mainly guided by the aim of making the largest profits in the shortest time irrespective of consequences, the former had, at least to some degree, to foster the growth of more permanent wealth in the colonial areas, so that it might at least levy the taxes which were its life blood. The antithesis need not be drawn too sharply. The most that can normally be expected of colonial governments within the framework of imperialism, was that it compelled these governments in their own interests to accept the ultimate advantage of long-run over short-run profits, whence can be derived virtually the entire range of imperialistic humanitarianism. Given the fact therefore that the end of foreign rule was far away in the future, wisdom lay in taking maximum advantage of it within the limits of imperial humanitarianism. Ranade was exactly doing that and considering that politics is the art of the possible he cannot be faulted on that account.

The second reason was that though the colonial governments like the Government of India were creatures of the imperial government, in time they developed a personality of their own and began not only to act independently on their own but, as rulers on the spot, took positions, that were quite contrary to those of the imperial or home government. And sometimes the local government's views and actions were much nearer those of the Indian nationalists than that of the imperial government. Not that it always worked but there was some room for play here and it was only natural for the early nationalists to take advantage of this and play one against the other. When Ranade maintained that there was no difference between them and the Government of India in regard to the development of industries he was really referring to this aspect.

There was ample evidence to show that the Government of India did develop into an independent entity as distinguished from the home government, and its inclinations and policies were not totally dictated by the latter. This is very clearly brought out in the foreign policy of the Government of India in the nineteenth century. "The foreign relations of India, despite ultimate control by Great Britain, expressed interests and needs rooted in the sub-continent. The Government of India pursued policies in foreign affairs in the nineteenth century that reflected the political, economic and geographical realities of the situation, with the impulse for these policies coming from within the structure of the bureaucracy of the Government of India, not of Great Britain. ...When foreign policy became visible, that is, when the state was reached for public pronouncements of policy aims and for the defence of their execution, London often seemed to be the place of origin. But this is misleading. In fact, to a quite extra-ordinary degree, decisions were made in Calcutta that reflected pressures from district officers, agents on the frontiers and officials of provincial capitals. The role of London was to demonstrate how actions that had been taken in India were the products of national policy, when in fact, either the home government had been ignorant of the course of events or actively disapproved of them, but felt compelled to accept them." [Embree, 1989].

This was visible in other things too. The Government of India undertook extensive public works such as irrigation projects, telegraphs,

roads, etc. It is well known that in the case of the hated cotton excise duties levied at the behest of the home government, the Government of India agreed with the nationalists that they were unjustified. Bipan Chandra says that Ranade wrongly "regarded active support to industrial development by the colonial state as entirely within the realm of achievable or practical" (p. lxxxvi). In this Ranade was right. The Department of Industries was started in 1905 to help Indian industries. In the opening years of the 20th century Government of India did take over the Bengal Iron and Steel Company which had failed and the Government of Madras initiated in 1898 and developed the aluminium and leather tanning industries in that presidency. U.P. Government wanted to act similarly when in 1910 the doctrinaire Lord Morley as the Secretary of State for India stopped all such government activity by his famous minute. But the process went on strongly during the first World War and after that the era of protection to industry opened at the hands of the same colonial government.

How much the Government of India had become a separate entity from the Home government is indirectly suggested in the 1917 Montague Declaration in Parliament about the progressive realisation of responsible government in India. The declaration, which was a statement of the policy of the Home government, whose creature the Government of India was supposed to be, stated expressly that "The policy of His Majesty's Government, *with which the Government of India are in complete accord*, etc." That an all powerful government of Great Britain had to declare that their policy was also endorsed by a subordinate government of a dependency, speaks volumes about the position that the latter had acquired in the imperial mosaic. If Ranade sensed and saw this he was only taking the option of the second best where the first best, that of ending British rule, was far away.

I shall not linger on Bipan Chandra's appraisal of Ranade's famous essay on "Indian Political Economy" because it is dated, uninformed and along conventional lines to be found in all old textbooks on Indian Economics (Jather & Beri, for example). Bipan Chandra does not seem to be aware of the deeper methodological problems that inhere in Ranade's theme and argument and that the trend and conclusions of modern thought on the subject endorses fully Ranade's basic position regarding the relativity of the economic discipline and its lack of universality. This will take me far afield. I will only say that Bipan Chandra's appraisal in this regard is unfair to Ranade. Since I have discussed the question extensively, I shall only give the reference and stop [Sovani, 1974, 1980, 1991].

It is the misfortune of Ranade that he should be presented to the new generation by this compilation of his writings by a casual and idiologue editor in a wrong light and in a wrong way. Fate could not have been unkinder.

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Vijay Paranjpye. High Dams on the Narmada: *A Holistic Analysis of the River Valley Projects*, Indian National Trust for Art and Cultural Heritage, 71 Lodhi Estate, New Delhi-110 003, 1990, pp. 320+xxvii, Price: Rs 75/-

The book under review is the third in the INTACH series on ecology and sustainable development. Whereas the first one focussed on the Tehri dam, this one focusses on the Sardar Sarovar Project (SSP) and the Indira or Narmada Sagar Project (NSP) under which the waters of the Narmada river are to be tapped with the help of two big dams at Navgam and Punasa, respectively. Like the Tehri project, the SSP too has become very controversial. The present study gives the reader a good account of why there is so much opposition to the big dam idea from diverse angles: economic, political, social, seismic, ecological, environmental, cultural and religious.

The book consists of ten chapters, besides an interesting editorial by N.D. Jayal, a supportive foreword by Professor Satish Dhawan, and a prologue by the author. The author provides an acknowledgement list of his own that underlines the marvellous multi-disciplinary support accorded to him in the preparation of this holistic study. He being an economist, economic analysis receives top billing. And the reviewer being an economist, the review too gets oriented that way.

Chapter 1 briefly delves into the cultural ethos and the legend around the sacred rivers in general and the Narmada in particular. This is followed by a short account of irrigation development efforts in the past within the Narmada valley, highlighting both the pre-Narmada Water disputes Tribunal (NWDT) controversy on height of the Navgam or the SSP dam between Gujarat and Madhya Pradesh, and the controversy and popular opposition since the Tribunal's Award in 1978. In Chapter 3, the author discusses the NWDT Award. Besides revealing the roles played by politicians at the helm of affairs, irrigation and power planning engineers, and the judiciary in sorting out inter-state differences in sharing waters of this inter-state river, this chapter throws up two, somewhat inter-linked, questions about (1) the very quantum of the river flow and (2) the optimum height of the SSP dam.

Paranjpye rightly objects to the quantum of Narmada water being simply a matter of agreement between the chief ministers of the three concerned states who declared in 1974, presumably for the Tribunal's use, Narmada flow to be 28 million acre feet (MAF). Fortunately, this figure is close to the experts' estimates (28.92 MAF by the Khosla Committee and 27.22 MAF by the Technical Experts appointed by the Tribunal). He is unjustifiably inclined to the lower estimate of 22.22 MAF, which was arrived at by the Tribunal, at an early stage, on the basis of flow data for mere 22 years of the most recent period. Since the experts' estimates are based on a longer series (70 to 80 year period), these cannot but be accorded greater credence over those based on a short series which might be less balanced in terms of good and bad rainfall years. This elementary hydrological truth needs pointing out here because time and again one comes across many a Narmada activist expressing unwarranted grouse over this matter.

Unfortunately, the other issue about the dam height has not attracted the due attention it deserves in the post-NWDT Award phase of the debate. Paranjpye has done well to point out how this vital parameter was raised or lowered at various stages before the Tribunal pegged it down to the present level of 455 feet for the SSP dam. In 1956, a height of 160 feet emerged in the CWC investigative work (even at this height irrigation potential of 4.4 lakh ha exists). In 1959, it was lifted to 300 feet for the second stage. The Planning Commission, while sanctioning in 1960 the first stage of the project, approved a height of 320 feet for the second stage. When the Government of Gujarat thereafter pressed for a much higher level of at least 460 feet, the then Union Minister of Irrigation and Power intervened and the stillborn Bhopal Agreement between the Chief Ministers of Gujarat and Madhya Pradesh was reached in 1963, wherein a height of 425 feet was envisaged. As the MP Chief Minister promptly afterwards questioned the veracity of

the agreement and insisted on a height of 162 feet only, Dr. Khosla Committee was constituted to look into the whole matter. This Committee recommended in 1965 a height of 500 feet. As both the states of Madhya Pradesh and Maharashtra rejected outright the recommendations of this technical committee, the Centre appointed in 1969 the NWDT.

From Paranjpye's write-up one gets some inkling into host of factors behind dam height. He, however, is disinclined to reveal his position on this vexing issue. That lower height reduces sharply both the extent of land submergence (and the RR problem of oustees thereof) and the risk of dam-induced seismicity needs wider and closer attention than has hitherto been the case. Can the height be reduced at this stage? Yes, provided the concerned states jointly approach the Centre to undo the binding nature of the Tribunal's Award in this regard. In a very narrow sense, the issue of small-scale versus large-scale surface water-based irrigation works is one of height of dams or bunds, as irrigation (and hydel power generation) capacity rises sharply with the height of a dam/bund.

Chapter 4 is entitled 'The Economics of Dams in India'. It is laced with assorted write-ups or observations on water resources and irrigation in India. The attempt is to apprise the reader with serious shortcomings in irrigation planning and implementation. Towards this end, the author makes an extensive use of the PAC reports, which have received publicity in newspapers quite out of proportion to their intrinsic content and merit.

Unfortunately, the chapter brims with half-truths, unfounded assertions, unwarranted statements, inferences contrary to cited evidence, etc. So, a reader would have to be very wary. The two following examples would suffice. The claim that "even at constant prices the small-scale irrigation (both surface as well as sub-soil) is far more cost efficient" is the result of a faulty use of data in Tables 12 and 13 (p. 86). Firstly, the plan investment figures for minor irrigation are exclusive of huge investment on private or farmers' account. Secondly, these do not reckon with very high supporting investment costs of rural electrification (typical estimates: Rs 30,000 per pumpset) and power generation (typical estimate = Rs 90,000 per pumpset) required for the millions of electric pumpsets that now constitute the mainstay of *newer* minor irrigation works based on ground water as well as surface water.

It is a singular aspect of debaters that they take a simple demolition or rebuttal of their rival's standpoint as enough for establishing the validity of their cause. The critics of big dams have drawn attention to numerous ills of major irrigation works, but shied away from an equally critical scrutiny of minor irrigation works, where too the ground reality is none too rosy. I have already pointed out that the much-publicised cost advantage of minor over major irrigation is not well-founded in facts [Dhawan, 1989]. Likewise, the much-paraded advantage in capacity utilisation is of doubtful validity. It is unfortunate that some working assumptions of the Planning Commission in this matter have been mistaken for empirical reality by scores of analysts, including Paranjpye [Dhawan, 1991(a)]. In his case, he is dimly aware of the limitations of the data base (vide his footnote to Table 9), and yet he chooses to take an alarming view of the fact that the all-India rate of capacity utilisation for major irrigation was only 84.3 per cent as against 94.1 per cent for minor irrigation works. Proponents of minor irrigation cause, especially of small-scale surface-water based schemes, would receive a jolt whenever pucca estimates of capacity utilisation turn up one of these days. This is being asserted on the basis of limited survey-based results this reviewer has seen. Some inkling into the same is provided later in the review when we discuss lift irrigation in Panchmahals as an alternative to big dams.

Chapter 5 focusses on irrigation development in Gujarat, the main beneficiary state from the SSP. It highlights the seamy side of major irrigation development in the past, namely, unutilised capacity, the engineers-contractors' nexus to defraud the exchequer, time and cost over-runs in project completion, departmental inefficiencies, waterlogging, dam failure (Machhu dam),

corruption and bribery, rising project costs, financial losses due to low irrigation rates, etc. Not unexpectedly, the author refrains from giving an account of the minor irrigation development in the state. He is, however, aware that (a) there has been overdevelopment in ground water irrigation, leading to ingress of sea water into coastal Saurashtra and (b) farmers' willingness to pay more for canal water as signified by the high cost they incur in well irrigation (owned as well as purchased).

Economic analysis of the SSP is taken up in Chapter 6, which is not well written. Since the project is centrally approved, it means (a) the *undiscounted* BC ratio is at least 1.5 for the irrigation segment and (b) the rate of return on investment in the hydel power segment is above 12 per cent. The anticipated values of these two parameters or criteria as per the project promoters' assessment are not ascertainable from the INTACH report, presumably because Paranjpye could not get access to the project reports submitted to the Planning Commission (see the editorial, p. vii).

As for the irrigation portion of the SSP, the undiscounted BC ratio is said to be 2.08 for the Gujarat state. This is underpinned by Rs 1,165 crore of annual onfarm income benefits and Rs 559 crore of annualised costs, both computed at 1986-87 prices (source: Narmada Development Authority).

Paranjpye proceeds to evaluate the SSP within the discounted BC framework, using 12 per cent as the rate of discount. After closely looking at the assumptions of the project promoters - and altering them where necessary - he comes up with a BC ratio of 0.66, and an IRR of 9.2 per cent for the project as a whole. Since this BC ratio is below one and the IRR is also below the rate of discount of 12 per cent, he finds the SSP an economically unviable proposition.

While this reviewer agrees with his altered assumption that project costs would exceed by a factor of almost one-third, he is disinclined to do so in respect of Paranjpye's other two major alterations, namely (1) the gestation period of the project would be 27 instead of 22 years, and (2) the onfarm benefits from irrigation would be one-fifth less. Admittedly, he has advanced some plausible arguments for making the altered assumptions. But one cannot dismiss lightly the resolve of the Government of Gujarat to hasten the completion of the SSP, though their target of 10 years time is certainly ambitious. Likewise, his perception that 20 per cent of the 1.7 million ha of irrigation potential would be lost due to waterlogging-salinity problems is off the mark in view of explicit planning for vertical drainage within the SSP command. This reviewer rather fears overdrawal of ground water in the SSP command before long [Dhawan, 1991(b)].

At any rate, even a 9.2 per cent IRR cannot be dismissed lightly, more so for projects with long life and for the purpose of enhancing and stabilising agricultural production. After all, Nitin Desai Committee (1984) thinks 9 per cent IRR a worthwhile rate for agricultural projects. Paranjpye does not realise that this cut off value is determined by social rate of discount, and not by interest rate to be paid to lending institutions - the World Bank would charge 12 per cent on its dollar 450 million loan for the SSP.

The focus in Chapter 7 is on the problem of resettlement and rehabilitation (RR) of the people adversely affected by dams. In this reviewer's opinion, it is this negative side of the dams that should constitute the crux of the opposition to the big dam idea. This opposition reminds us of the proverbial limitation of BC analysis as a tool for judging economic viability of an investment project, namely, 'whose costs, and whose benefits', to which Paranjpye alludes in the preceding chapter. Our track record in RR activity has been dismal. Whether we will break new ground in the case of this project only time will tell. Although, thanks to the sustained intervention on this score from the World Bank, handsome financial provisions are being made, the Gujarat lobby is being naive in asserting that the envisaged RR would actually improve the lot of the dam oustees.

I have no basic difference with the author about the RR issue, but wish that he had dealt with an important aspect, namely, how lowering of the dam height reduces the scale of the RR problem.

Admittedly, even 10 per cent reduction in dam height reduces reservoir capacity more than proportionately, thereby reducing the irrigation potential of a dam more than proportionately. According to K.C. Thomas, a former Chairman of the Central Water Commission, the lowering of height by 10 per cent in the case of two Narmada dams would give rise to following order of reductions in storage capacity and land submergence [Dhawan, 1990]:

	in storage	in submerged area
1. SSP	57.2	61.6
2. NSP	42.7	43.6

Though these estimates need to be viewed with some caution, it is unfortunate that benefits and costs are not assessed in Indian water planning against feasible variations in the height of a dam. As to submergence at different heights, we have some interesting data from *Human Resettlement in Lower Narmada Basin* (1985) prepared by S.C. Varma for the Narmada Valley Development Authority of the Government of Madhya Pradesh. In the case of Narmada Sagar, the submergence-height relationship exists as follows:

Dam height (metres)	Submerged area (hectares)	Incremental area submerged per metre increase in dam height (ha)
190	1,000	-
210	2,000	50
230	24,000	1,100
244	46,000	1,571
261	80,340	2,020

Instead of such a relationship for the SSP, Mr. Varma mentions that in the first stage submergence when the dam height would be 106.70 metres (350 feet) the number of affected villages would be 23 (with 84 affected families), rising to 182 when the Sardar Sarovar attains its stipulated height of 138.7 metres (455 feet). Thus the number of oustee families rises disproportionately and steeply with the rise in dam height.

Another no small factor of advantage in reducing dam height is the reduction in seismic risk. One viewpoint, to which expression has been given by Prof. U.R. Rao, Chairman, ISRO, is that the risk of earthquake disaster from a dam rises manifold after the height of a dam has crossed a certain threshold level[1]. This security angle calls for a fresh look at the whole concept of optimum height of a dam. If this optimum height allows lot of water to flow down to the sea without conferring any irrigation or power benefit to the society, such water may still keep intact the ecology of the river on the downstream of the dam, about which apprehensions have been expressed by some ecologists.

Chapter 8 concentrates on the NSP, for which the officially computed BC ratio is 1.85.[2] In Paranjpye's assessment, the realistic BC ratio would be 0.27 at 12 per cent rate of discount. However, the corresponding IRR is placed by him at 9 per cent. If one reckons with the external economy of this project on the SSP, the national returns from the project as distinguished from the State-level returns to Madhya Pradesh would be higher than 9 per cent. In view of the close linkage between the two projects, a joint IRR for both the investment projects taken together ought to have been computed also.

Paranjpye rightly questions the Department of Environment (DOEn) norm of pricing the loss of forest cover due to dam building at the incredibly high value of over Rupees one crore per ha. In this connection, his following observations are noteworthy:

"So far, no justification has been provided or no rationale has been given as to *how* this magic figure of Rs 126.7 lakhs has been derived. Alvares and Billorey have used this figure and 'derived' a B/C ratio for NSP of 0.017. Apart from incorrect, simplistic methodology used, by using this figure for environmental loss they fall into a trap. In the case of the controversial Tehri project in Uttar Pradesh, the authorities had calculated a B/C ratio of 4.785:1 for the dam by *considering environmental benefits and losses*. Without environmental benefits/losses it was turning out to be 3.49, i.e., by incorporating the provisions of DOEn guidelines, the project was actually showing an improved B/C ratio! The 'logic' used by the authorities was simple. If every ha of forest felled for the project generates environmental losses, then every ha of planted forest (under compensatory afforestation) would ultimately generate environmental benefits .... " (p. 225).

Before the summary view presented in the final chapter 10, the penultimate chapter is devoted to

a discussion of alternatives. It brings together some ideas and suggestions which have been floated by the dam critics to meet the charge of the major irrigation promoters in India that there is no alternative but to build big dams for harnessing the water resources of the nation. Evidently, it is a tough task. Whatever be the limitations of this chapter, both Paranjpye and the INTACH deserve credit for their endeavours in this regard. The following five specific problem areas are discussed at length:

1. Meeting irrigation needs of the tribal people in the hilly, eastern Gujarat state;
2. Meeting irrigation and development needs of the Kachchh (Kutch) region;
3. Alternatives to hydel power needs;
4. Meeting civic and industrial water needs;
5. Development of land and water resources of the Saurashtra region.

At the face of it, the suggested alternatives seem sensible and appealing. However, these do require more thorough appraisal and also confirmation by various knowledgeable persons. As an illustrative case, I provide a critical appreciation of lift irrigation alternative for tribal areas. But before I do that, I would make two pertinent observations. First, the alternatives and the SSP lack comparability. Take, for instance, the irrigation objective of the SSP, namely, providing irrigation to 1.7 million ha of crop area. Alternatives for tribal areas envisage 0.2 million ha irrigation at an investment outlay of Rs 240 crore. Likewise, the proposed alternative programmes of development for the Kachchh and Saurashtra regions envisage additional irrigation of 0.075 million ha and 0.25 million ha, respectively. This adds up to only about half a million ha of irrigation potential.

Second, the investment outlays for the SSP are so large that these would crowd out many other programmes of agricultural development.[3] The needed funds for the alternative schemes can come from the hide of the SSP, through reduction in its investment size by lowering its dam height. Such redevelopment of investment resources will eminently meet the social objectives of development so intensely put forward in this chapter.

Paranjpye devotes considerable space to commend lift irrigation. In this context, he draws attention to the development of such schemes in tribal Panchamahal district. He is particularly impressed by lift irrigation development under the auspices of the Sadguru Water Development Foundation (SWDF), a non-governmental organisation promoted and nurtured by the industrial house of the Mafatlal Group. For reasons better known to him, he emphasises SWDF as an NGO or voluntary field organisation, without referring to its link with the industrial house whose backup of engineering skills and finance have proved critical in the efficient working of the lift schemes sponsored by it. He commends the SWDF long-range proposal submitted to the state government, that 500 more lift irrigation schemes (over and above 225 schemes already executed by the SWDF) could be established at a cost of Rs 35 crore, benefitting 1.25 lakh crop ha area of 62,000 farmers.

Girja Sharan and Sandeep Kayastha mention in their study *Lift Irrigation in Panchmahal* some more details about 215 lifts to be established in the first phase of this proposal [Sharan and Kayastha, 1990, Appendix A-2]. These 215 lifts, sites for which have been identified by the SWDF, are anticipated to cover a crop area of about 42,000 ha at a capital cost of about Rs 19 crore. Of this irrigation potential, nearly 20,000 ha each is in the kharif and rabi seasons, and the rest (1,801 ha) under summer irrigation. As per the detailed investigations by Sharan and Kayastha, the lift irrigation potential for the kharif and summer seasons is of doubtful value. During summer season there is no water to be lifted; during normal rainfall years the demand for kharif irrigation is zero. For the Shakarpura lift, a great success story, they find that the firm irrigation capacity is for 129 ha of crop area only, and not 360 ha as per the SWDF assessment (140 ha each in kharif and rabi seasons, and 80 ha during the summer season). Thus the realistic capacity is 36 per cent of the rated capacity. And only 103 ha, on the average, were actually irrigated between 1980 and 1986. In other words, the actual irrigated area is only 29 per cent of the rated potential. This percentage of utilisation is far below the 75 per cent utilisation assumed by Paranjpye.

The INTACH is to be complimented for bringing out this publication. Because of its

holistic character it is rather longish and unwieldy in its presentation. However, what an unwary reader would need to guard against is many numbers that are wrong either in magnitude or in the units of measurement. This is partly the handiwork of the printer's devil, but also a result of hastiness in writing and production. Not infrequently, expressing 'lakhs' and 'crores' into 'millions' (and *vice versa*) has been erroneously done (not an uncommon infirmity in Indian writing). For example, irrigation potential of the SSP is wrongly mentioned as 17.9 million ha on p. 254, and data in Tables on pages 173-76 are listed in crores of Rupees while these ought to be lakhs of Rupees. At several places, the disappearance of the decimal point (e.g., on p. 301 in capacity utilisation parameter), or its replacement by a comma (e.g., on p. 170 the astronomical figure of Rs 17, 169 crores as the cost of compensatory afforestation), plays havoc with an estimate. The attempt to insert some nicely printed slips of errata is half-hearted; and on some occasions it appears needless (e.g., on pp. 301 and 306).

NOTES

1. Source: Personal Communication, January 30, 1991. Professor Rao writes "the frequency of earth quake shows practically no increase upto a particular height and then exponentially increases beyond the critical height. The critical height itself varies from region to region, being dependent upon the topography, soil characteristics and the existence of fault zones. The general shape of the curve, however, is practically the same at all places".

2. It is not clear from the text whether it is discounted or undiscounted ratio - most likely, it is the latter one.

3. This crowding out effect, more at the stage of actual allocations of investible funds than at the sectoral Plan formulation, has earned irrigation engineers both bitter hostility and unhealthy envy from soil conservation scientists, dryland farm experts, tribal and backward area programmers, etc.

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Import Canalisation by Dilip K. Das; Sage Publication, New Delhi (1991); Pp. 151, Price Rs 185/-.

In this slim volume, the author has made a study of import canalisation in India in all its aspects. In the first three chapters there is a theoretical discussion of the various features of import canalisation; in the subsequent five chapters there is a detailed examination of the Indian experience. The last chapter discusses certain pragmatic policy options.

Import canalisation is defined as the control of trade flows by government or a government agency. They decide what is to be imported, how much is to be imported and at what price. The canalising agency is a service organisation which imports in bulk, commodities/raw materials/intermediates, and distributes them to domestic production units. It is supposed to understand the requirements of the domestic market, be an expert buyer and have good materials management. Public ownership of such an organisation may not be necessary but public control and management are.

Canalisation has a long history. It flourished in the thirties when regulated trading was common. It flourished during the World War II in developed countries and during the oil crisis in 1973. It has been widely adopted in the developing world in the last four decades. Countries as different as Korea and Nepal practise it. Export led countries like Japan and Korea practise it as much as import substituting countries like India.

In developing countries canalisation was part of a thought process which emphasized the need to have all critical means of production in public hands. In many countries in Africa canalisation occurred because of indigenisation or take over

of foreign trade from expatriates who controlled it earlier; in Burma and Bangladesh nationalisation led to the same result. Canalisation was also a result of the need to trade with centrally planned economies as in India. The desire to exploit monopoly power sometimes led to canalisation as in Jamaica and Peru.

Canalisation usually involves the import of bulk items such as: a) essential commodities like foodgrains, edible oils and sugar; b) industrial raw materials like natural rubber, newsprint and raw cotton; c) intermediates like cement, Pol and fertilisers; and d) consumer goods like cloth, bicycles and electric bulbs.

Profit may not always be the criterion of import for a canalising agency. Since it is a public organisation its actions are governed by directives from government, based on its domestic and foreign policies; availability and pattern of foreign exchange; and the desire to benefit from the exercise of monopoly and monopsonistic power.

Its *modus operandi* is usually as follows:

An import plan is prepared in consultation with the concerned ministries and the user industries and on availability of foreign exchange indicated by the Ministry of Finance. Once the quantity to be imported is determined, details like periodicity, quality specifications, area of import are decided, based on market intelligence and aid agreements. Since import has to be made at the lowest price, global tenders are floated, and long term and medium term contracts with floating price clauses are made depending upon the commodity to be imported. Domestic prices and allocations of imports are decided by government. The agency only claims a service charge and all profits or losses on these transactions are passed on to government.

Several advantages have been claimed for canalisation: a) improvement in the country's terms of trade due to an exercise of monopsonistic power; b) economies of large scale imports; c) better freight and charter rates because of large volume of shipments; and d) appropriation of quota rent by government instead of private importers.

As against this the likely disadvantages are: a) possibility of delay in decisions and failure to avail of market opportunities due to government rules and procedures; b) a tendency to play by the book and an aversion to risk due to public accountability; c) a shifting of the commercial character of the organisation due to lack of autonomy; d) higher costs due to poor materials management - large handling losses and poor stores accounting - which are passed on to user industries; and e) possible injection of harmful political and diplomatic considerations into international trade.

Why do developing countries accept an interference with the market, which theoretically can be expected to perform better? Market imperfection is the answer. Developing countries accept an interference with the market to correct adverse terms of trade caused by market power asymmetry *vis-a-vis* developed countries. Similarly a developing country with an acute foreign exchange shortage will accept restrictions on imports because the alternative of exchange rate adjustment may not work in such a situation. Of the three ways in which such a restriction can be brought about,viz., exchange control, quotas and canalisation, canalisation appears to be first best only so far as it corrects distortions in international trade. It is better than tariffs for absorbing import premia because it is opaque rather than visible and hence more acceptable. It is also more flexible than flexible tariffs. These two characteristics may, however, use too many resources and, therefore, lead to higher costs for users.

The analysis of the Indian experience in the book under review with regard to canalisation covers: an evaluation of the efficiency of the allocative process of canalised imports, the success of canalising agencies in capturing quota rents, the extent to which bulk buying has made use of monopsonistic power in reducing costs of imports and improving the terms of trade, scale economies in reducing costs of imports, efficiency as importers, impact of canalisation on user industries, measures to increase the autonomy of canalising agencies and the feasibility of decentralisation.

Not all items, the imports of which are canalised in India, have been covered. Only edible oil, newsprint, natural rubber, iron and steel, non-ferrous metals and steel scrap and sponge iron have been studied. The method used is soliciting

information through questionnaire and interview of bureaucrats, personnel of canalising agencies, suppliers and user industries.

Like most developing countries India's import policy was to subserve the need to conserve scarce foreign exchange for the import of commodities essential for consumption, investment and exports. Therefore canalisation was introduced to achieve the same objectives mentioned earlier. The State Trading Corporation (STC) was set up in 1956 and specialised commodity corporations were set up from 1963 onwards. 37.28 per cent of total imports were canalised in 1968-69. The figure went up to 65.81 per cent in 1973-74 and 66.22 per cent in 1980-81. Even after liberalisation following the Abid Hussain Committee Report it had come down to only 60 per cent in 1990.

The STC's mandate was 'to undertake at the instance of the Union Government import and internal distribution of any commodities in short supply with a view to stabilising prices and rationalising distribution'. Hence strategic decisions are taken by the parent ministries, Ministry of Finance and ad-hoc committees and passed on to the canalising agencies (CAs) for implementation. Thus demands of actual users are registered with the canalising agencies but the actual volume of import is decided by the parent ministry in consultation with the Ministry of Finance. The area of import would depend not so much on commercial judgement but upon aid availability, both bilateral and multilateral. Prices at which the goods imported are distributed are determined by a committee headed by the Chief Controller of Imports and Exports or by the concerned ministry or organisation such as the Directorate General of Technical Development, the Rubber Board and the Steel Authority of India Limited. The canalising agency only gets a service charge consisting of handling charges, bank charges, warehousing charges and insurance. It is a fixed percentage of CIF value varying from 1 to 5 per cent.

Although most CAs have excellent market intelligence its use is limited because they do not have scope or latitude to exercise their commercial acumen and business prowess. Again though they were set up partly to carry on trade with centrally planned economies, they did very little trade with these from the sixties onwards because Russia and other East European countries decided to deal with private traders in order to get the benefits of price competition. Only 4.5 per cent of STC's total imports in 1984-85 came from COMECON countries. Newsprint, Caprolactum and DDT were the principal items. Only 3 per cent of the country's total imports in that year came through The Minerals & Metals Trading Corporation (MMTC).

The examination of the performance of canalisation in the six commodities mentioned above shows certain broad features:

1) By and large the delivery of bulk items was quite satisfactory and there was not much under-supply or over-supply to individual users. However, in iron and steel there were quite a few problems because the number of items imported was large, the quantities small and the specifications quite varied.

2) The CAs displayed very little quality consciousness and quite a few problems arose due to quality variation which raised the costs of the end user.

3) The timing of market entry was not always the best as a result of which costs were higher by 10 to 20 per cent.

4) Charges by the CAs were unreasonably high. Even when an importer was allowed to import directly he had to pay the service charge. Storage cost and transport cost were much higher than rates ruling in the market and higher than what large business organisation should be able to secure. Spillage charge was also too high.

5) Large users complained more about the inadequacies of the CAs than the smaller ones. The former felt that they would be able to import at lower costs because of better timing, better periodicity and better inventory management. The smaller ones by and large were quite happy with what was being done. In many instances they felt that they would go out of business if canalised imports were not available to them. Since a subsidy was also given to small producers in many items this satisfaction may be partially due to this consideration.

6) Since the import schedule was made up on the basis of the convenience of the canalising agency,

it did not contribute to good inventory management on the part of the users.

In view of all these factors the author does not consider the CAs very efficient importers. Did they exercise their monopsonistic power in world markets? The author does not think so, although retired executives of the CAs pointed out to specific examples to the contrary with regard to sugar and fertiliser. He argues that they have failed in this regard because a) quantities purchased by India are too small by world market standards (except fertiliser); b) CAs are not perceived as being monopsonistic by suppliers, but are looked upon merely as opportunity markets; c) even after so many years no regular suppliers have been fixed for raw materials purchased; d) the structure of international markets is oligopolistic for several commodities. Hence monopsonistic leverage is not easy. On the contrary prices firm up, even on falling markets, when STC/MMTC enter the market; e) senior officials of CAs felt uncertain about their monopsonistic power.

They do not seem to have achieved scale economies either, because of: a) a large and wasteful structure which adds to costs of imports; b) even large purchases were not being made at good prices due to market entry being affected by bureaucratic decision making. c) not enough organisational dynamism; and d) very poor inventory management.

On the other hand, according to the author they have been successful in appropriating quota rents. There is no under-invoicing or over-invoicing with a view to building up illegal foreign exchange holdings, as is done to a large extent in non-canalised trade. They have also been successful in distributing imported raw material equitably between large units and small units. The latter which do not have the capability to enter international markets directly find the canalising arrangements quite satisfactory.

Why have they not been successful with regard to their major objectives? The author feels that this is because they are bureaucratic and not commercial organisations, have no autonomy and are accountable to Parliament. In a commercial organisation profit is the guiding principle. So judgements are sometimes made on slender evidence and split second decisions are taken involving considerable risk. All this becomes justified when at the end there is a profit. A failure often enough means that either the persons concerned go out or the organisation goes into bankruptcy. In a bureaucratic organisation procedure, precedent and hierarchy play an important part in decision making. More evidence has to be adduced, more justification has to be provided and more people have to be persuaded about the correctness of a decision before it can be taken. Therefore by definition, it cannot take speedy decisions, let alone split second decisions. In a market environment where great uncertainty prevails about the future and where many risk-taking players are involved, they are at an obvious disadvantage.

This disadvantage is compounded by the fact that CAs have very little autonomy. They have to go to various ministries for almost every decision. And such decisions are taken by various committees. The result is that CA's willingness and ability to take decisions atrophies. They slowly degenerate into executors of decisions taken elsewhere. Also in a bureaucratic set-up those who control them tend to become more assertive, often dictatorial towards the CAs because of this.

Thirdly, accountability to Parliament saps their confidence and leads to total risk aversion. This is because while penalties for failure are severe there are hardly any rewards for successes. In such a situation avoidance of failure becomes the prime objective of such organisations. This is sought to be done by not taking any risks and operating strictly according to rules and procedures. Instead of entering a falling market, tenders are called for to prove that the lowest price has been obtained, even if this means that higher prices will prevail two months later when they are opened. It also means that hardly any attention is paid to the end user's production schedule.

In what way should the policy be changed? The author suggests that these organisations should be given greater autonomy and be asked to work on commercial principles like the *"Sogo Shoshas"* in Japan or the *"Chaebol"* in Korea. Also the policy of canalisation should not be all enveloping but selective. It should be applied only where it can

be implemented with reasonable efficiency and benefit the user industries. When it does not benefit industry it should be withdrawn. The guiding principle should be: imperfect markets are better than imperfect planning and controls.

The case studies have indicated that canalisation is advantageous to small and medium scale units. Therefore a compromise arrangement would be to let the existing arrangements continue for these units and allow the larger ones to import on their own, with a limit on the total quantity to be imported. The latter should be determined in consultation with the Ministry of Finance and the user industries. In any case, heterogeneous products imported in small quantities should be left to the user industries.

An alternative would be to allow trade associations to import on behalf of their members. Issues of mutual interest can be solved more easily without bringing in the government. Voluntary canalisation can be yet another alternative, where users go to the CAs when they are more efficient.

The study is useful as it gives a good idea of how canalisation works in the commodities studied. It brings out quite clearly the advantages as well as shortcomings of a system which is dominated by bureaucrats and bureaucratic ways of working. Taking advantage of market opportunities, exercise of monopoly and monopsonistic power and serving the interests of the user industries become difficult in such a situation. One wishes, however, that he had given a little more of what the people in the CAs felt about these things.

But the suggestion about greater autonomy and commercial operations is easily made but difficult to operate, given the peculiar character of a public corporation. Autonomy would mean that public resources are handed over to the Chief Executive Officer to play as he likes. If he takes a mistaken step the consequence will not be bankruptcy as in the case of a private corporation. More resources will have to be provided to the corporation to continue. Even if bankruptcy may not be the consequence, a substantial write-off of losses will be needed. A genuine problem thus arises as to whether such write-offs are not manipulated in a public corporation because those who take the final decision do not face the prospect of ruin as in a private corporation. Hence protection of public funds is sought (a) by involving more people in decision making and (b) by a *post mortem* of wrong decisions. Difficulties arise in deciding whether an error of judgement was involved or something more sinister. Unfortunately hindsight always persuades the inquirers to incline towards the latter with disastrous consequences on decision taking ability. No satisfactory way of combining freedom with accountability has been thought of so far.

The reviewer was witness to a Public Accounts Committee hearing where STC was being questioned why sugar was sold in the international market at £ 100 per tonne because a month later the price had risen by £ 20 per tonne. The Comptroller and Auditor General (CAG) had put this down as a loss of several crore of rupees to government due to negligence or lack of sufficient alertness on the part of those who negotiated the deal. The argument that the particular price seemed reasonable at that time on available information did not cut much ice. On the other hand, the CAG would not have congratulated the concerned officials had the price gone down by £ 20 in the following month. It would be assumed that they were doing their normal duty. Thus risks have always to pay off, which is not possible in an uncertain situation.

There is also an unarticulated presumption in this context. In a rules-bound bureaucratic environment, a faint suspicion attaches to those who do not go by them, that they may do so for personal gain. The author quotes from Shri P.L. Tandon's autobiography the existence in the early seventies of a policy circular in the STC which advised the decision makers to carefully look over a decision taken faster than the 'normal pace'. Ironically the Committee on Public Undertakings upbraids the CAs for their 'lack of enthusiasm and foresight'.

Autonomy would also mean that the only criterion by which a CA is judged is profitability. Therefore it would need much greater freedom with regard to its operations in terms of availability of foreign exchange, entering the market, stock holding and so on. Also the rewards to and treatment of personnel will have to be commercial and not bureaucratic, i.e., risks taken which pay

off are rewarded adequately and failures punished. Citing the example of Japan or Korea is not useful partly because the organisations mentioned are in the private sector and partly because these organisations work in a totally different environment. In other words, to make these suggestions operative would need a substantial change in the environment as well.

The book has appeared at a time when such changes are being contemplated. Liberalisation, dismantling of controls and greater orientation to the market would automatically lead to a diminution in the role of the CAs, if not to their total elimination.

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Energy Use In Rural Areas: Process, Problem and Prospects by S. Giriappa, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, 1991, Pp.xiii + 180, Rs 190/-.

The central theme of this book is the estimation of demand and supply of different types of conventional energy in agriculture, rural industry as well as rural households in a taluka in the Dakshina Kannada district of Karnataka State, based on a survey of a sample of villages and households. This occupies about 70 of the 180 pages of the book. The rest of the book is devoted to a general introduction to the energy scene in India and to some aspects of energy at best peripheral to the central theme, including an energy input-output exercise in crop production.

The first three chapters, entitled Energy Scenario in India, The Problem, and Sample Design contain a lot of facts, rather unsystematically and tiresomely presented, without the reader being at all clear what all this is about. Even the chapter on The Problem nowhere clearly states what the problem discussed in the book is. It is only in p. 42 that one gets for the first time a clear statement about the task in the book. 'The IREP (integrated rural energy planning) survey in Udupi block was undertaken with the specific objectives, set by the rural development departments, to find out the nature of energy consumption across different landholdings and income groups, to project supply-demand patterns for the entire taluk, to assess the importance of local resources in meeting the energy gap and to work out implications (finance, etc.), which would pave the way for a self-sustaining and integrated system.'

Until the survey results are presented, what 'energy' is the focus of the study is not made clear. Different items are mentioned in different paragraphs, and at one point (p. 9) under the heading 'Energy Consumption in Rural Areas' it is said, 'In energy are to be included food, fuel, fodder and fertilizer besides labour.' But even this is not clearly discussed, until in a chapter at the end there is an attempted estimation of energy input-output in crop production in these terms.

The empirical data on energy use from different sources were collected from a sample of 100 households from every village in 12 selected villages in the taluk. The manner of selection of the villages suggests a purposive selection. Nothing is said about the nature of the selection of households in every village - random or purposive. The sample size is different for different villages. Yet the averages for different groups by size of land holding, occupation and income for the 12 villages together are unweighted. Fortunately, the estimation of energy as a whole is on the basis of this average use per household in different occupation groups and the distribution of all households in the 12 villages according to these occupations, which is attributed to the entire rural taluk.

The reference year of the survey was 1988-89. But in Chapter 6 there are references to actual consumption of energy from different sources in the two subsequent years, as well as to the 'stock position' with households in different occupation groups in each of the preceding as well as succeeding 5 years. But nothing about how these were collected is mentioned anywhere in the text.

The household energy consumption reported in Chapter 5 relates to firewood, fuelstick, crop residues, cattle dung, kerosene, electricity, liquid petroleum gas and gobar gas. On the basis of the household survey, the per household and per capita consumption of the different fuels in each

occupation group are estimated. It turns out that more than 96 per cent of the total energy from these various fuels was used in the household, with agriculture and transport using about 1.5 per cent each and rural industry hardly 0.8 per cent. Amongst the fuels, firewood accounted for 43 per cent of the energy and fuelsticks and crop residues a little more than 50 per cent, with kerosene for only 2.5 per cent and electricity and petrol together for as much. The use of energy from firewood, fuelsticks and crop residues per household was much higher for the big, medium and even small farmers than the average for all households, the big farmers using almost 2.3 times the overall average. The least use of these was by the fishermen, who made up for this, to only a very small extent, by using a little more kerosene than the overall average. The big and medium farmers also used more of every other fuel (except kerosene by big farmers). The business men and service households used more electricity and petrol, partly for trade and industry. The labourers, fishermen and marginal farmer households were found to use much less energy from these sources, or from any other source for that matter.

The pattern of use of firewood and fuelstick and crop residues was much less clear when examined by household income level: except for the highest income category, the differences were much less amongst the rest, with no particular trend. There was more systematic variation in case of other fuels, with dung cakes being used by only the low income households, and use of fuels other than kerosene showing a rising trend with household income. There was no particular trend with regard to kerosene.

Data on the quantity of the different fuels purchased by the average household in different categories and their money values are presented. The author mentions the very large differences in the price paid for the same type of fuel by households in different occupational categories in the sample villages, but no explanation is provided.

On the basis of these estimates of per household use of different types of fuels in the eight different occupation groups, estimates of total demand for each type is attempted for every year upto 1993-94, in Chapter 6. For this purpose, certain assumptions are made about the growth rate in the number of total households in each group, without providing any justification. In addition, on the basis of changes in per household use of each type of fuel in the two years 1988-90, the growth rate in per household demand for each type of fuel is also estimated for the later years. The two together help to estimate total demand for each type of fuel for the years 1988-94.

Supply during the period is estimated by assuming no change in supply of fuelwood, fuelsticks and crop residues, an abundant supply of dung for direct fuel as well as for bio gas, and rates of increase varying from 7.6 per cent to 12.5 per cent a year for electricity, diesel, kerosene, petrol and LPG. Again, no justifications have been provided for such anticipated rates of increase.

Therefore, there is anticipated deficit for fuelwood, fuelsticks, crop residues and electricity in the rural taluk in which these four account for nearly 95 per cent of the total fuel.

Chapter 7 presents an "Action Plan" to meet the deficits in fuel supply. The only specific plan relates to many more Gobar Gas Plants, at an investment of Rs 2 crore, saving about a fifth of the firewood consumption. Similar investments for more fuel saving cook stoves, and social forestry are also advocated. The total capital cost is estimated at Rs 40 lakh for the taluka in 5 years.

The remaining five chapters of the book deal with problems not directly relevant to the central theme. Chapters 8, 9 and 10 entitled Social Problems of Energy Crisis, Agriculture and Energy, and Energy Management are very thin in content and do not add up to much. The eleventh chapter, entitled Crop and Input Mix, attempts a comparison of total input of energy in production of an individual crop and of the total output of that crop, again in energy terms, in order to judge the efficiency of different crops in a given region and of the same crop in different regions, in terms of energy input-output. While the author notes the limitations of such comparisons, as non-substitutability of different types of inputs, and the non-inclusion of natural (i.e. free) inputs like rainfall, temperature, soil, etc., what he does not appear to recognise is the different ways in which

the market values the products. Therefore, finding that in an area the energy efficiency of ragi is greater, (meaning the energy output per unit of energy input is higher) he advocates shifting inputs to ragi from paddy. But what if the market values paddy much higher than ragi (which presumably it does)? If only the author had brought in such considerations, that would have warned the reader about such facile conclusions.

Apart from the inordinate length of the book in which matters which are at best very marginal to the central theme have occupied substantial place, thereby taxing the reader's time and purse, the book appears to have had no editing done, either by the author himself or by an editor to whom normally publishers submit the text for the purpose. The result: (a) Whole portions are in effect repetitions. For example, matter in Pp. 59-63 is in effect repeated in Pp. 80-82. (b) Tables are repeated (Tables 5.1 and 5.10), are not properly titled (Tables 5.3, 5.8, 5.9, 5.10 should have carried "per household" in their titles, to avoid confusion). (c) Tables are not correctly calculated (the figures in the 2nd col. and last col. of the third row, 2nd col. of last but one row, of 7th and 9th cols. of the last row of Table 5.4 are wrong; some of the figures in Table 5.3 and 5.10 do not agree; in many other tables the figures have small errors). (d) One has to make considerable calculation to discover not only that the average annual increase figures given in Table 6.3 are not the averages of the annual increase rates , but also what exactly they refer to. (e) The column on energy productivity in Table 11.10 is calculated as kcal of energy input per kg. of output when it should have been the reciprocal of this. (f) There are whole sentences which do not make sense or do not clearly convey the meaning which the reader, on repeated reading with reference to the context, guesses are meant to convey. (For example: "Rice was the staple food of the population and the proportion of irrigated land was average in all the villages" (p. 43); "There will not be much change in the proportions over the five years at 82 per cent of total households and also in the group distribution" (p. 87); "More increase in fuelwood or efficient usage may note the long run answer especially in case of rural poor who seem to have low intensity with low thermal efficiency" (p. 122). More examples will only waste the space in the Journal. If the book had been published after proper editing it would have been slimmer, readable and useful, and less expensive.

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Studdert-Kennedy, Gerard, *British Christians, Indian Nationalists and the Raj*, Oxford University Press, New Delhi, 1991, Pp. xi+274, Rs 220/-.

The book is not about India itself but about the British and their preoccupation with India in the period between the world wars. The study is concerned with a specific 'public' in interwar British politics, the numerically small but attentive networks of these who were concerned, for whatever reason and whether they actually served these or not, with India as an imperial responsibility.

These people, called here Anglo-India - as not to be confused with Anglo-Indians or Europeans - was not a religious society as such. But British Christianity had public importance as an institution integral to the Raj, and British Christianity had substantive importance to many significantly placed individuals in the civil and military structures of the administration, as well as others back at home in England who had direct as well as indirect responsibilities or interests concerned with India and the Empire.

The history of British rule in India was not directly determined by the religious beliefs of the imperialists. But that is not to say that beliefs were insignificant. It is argued here that "a language of belief, interpretation and judgement, which can only be described in terms of the category of religion, had a pervasive and neglected importance in the impulse to retain imperial assets, and even more perhaps, in the associated impulse to control and direct the moments of concession and withdrawal which mark the imperial theme in this period" (p. 5). This the author proceeds to do well and truly.

The British politicians implicated between the world wars were deeply divided about India. They

were not engaged in a planned withdrawal from India. On the contrary they were engaged in a tenacious defence of the material interests of the empire. The most serious arguments of the 1930s were not between right and left or authentic liberals and die-hards, in the context of a principled conflict over imperial policy, though that is what a great deal of contemporary rhetoric suggested. They were essentially conservative groups, under the colour of all the three parties, which were in substantial agreement over fundamentals but divided over considerations of timing and tactics. Some of these considerations had little to do directly with India and were further complicated by personal and organizational ambitions and loyalties that had nothing to do with India.

Broadly speaking, the Christian theological view was that the British Empire was the first Christian empire or Christ's Kingdom. The British place in the providential order of things was special. Successive imperialisms had made their contribution to the vision of a time when the 'earth shall be filled with the knowledge of God' by developing the capacities of the areas dependent on them. St. Paul's *'civis Romanus sam'* was a commitment to prospective human unity, to be achieved over time by the instruments of imperialism, legal, technical and intellectual, and by the expression through laws of the organic service ideal. The benefits of empire were means to a greater end. There was agreement that political power will have to be transferred ultimately to these societies. Secondly, there was also agreement about their unreadiness for such transfer immediately because of the character and state of these societies. They were an assemblage of essentially different, socially retarded and mutually antagonistic social groups held together under imperial discipline and rule. They were not ready for democracy because democracy was not a theoretical construct like the decimal system which worked the same way everywhere. It was culture-relative. It was essentially a Christian social arrangement which did not work well or successfully if its constituent units were not endowed with Christian virtues and values the old Greek values, that were refined in the crucible of the Renaissance. As one of these societies, India's two main religious communities, Hindu and Muslim, were far away from Christian values. The Muslims were a little closer to them than the Hindus but not much. The Hindu is unrealistic in his view of life and Hinduism engenders in the character of its followers a lack of personality. He is not an individual. India lacks also a personality and hence a national entity. Both the communities in India will have to be transformed for making them fit for democracy and self-rule. The belief that non-Christian religions could, and indeed must grow towards and eventually into Christianity was earnestly articulated by Christian thinkers. It was therefore the responsibility of the British imperialists to see that the political power was transferred to these people slowly and in many stages so that there is gradual progress, and no chaos or bloodbath results. If the latter happens because of hasty transfer that would be irresponsible behaviour on the part of the imperialists. Within these two parameters the various positions and arguments of Anglo India revolved and their policies fluctuated.

Between the world wars dyarchy and federalism were two of the weapons available from the imperial armoury to British politicians across party lines. The arguments surrounding the birth, tormented infancy and demise of dyarchy in the twenties illustrate this. A decade later a false hope was released by the pushing and heaving of the Round Table conferences of 1930-32, the mouse of a 'federal solution' to the problem of Indian constitutional progress briefly favoured by some Princes. Enshrined in the Act of 1935 and a theoretical possibility till August 1940, it was effectively lost long before that in the hue and cry following its surprising appearance. Federalism was, in Churchill's view, a sham, and in that of Hailey, perhaps the outstanding I.C.S. of that period, a red-herring. But Samuel Hoar, the conservative architect of the India Act, with Sir John Simon (a former conservative), the Liberal Chairman of the 1927-29 Indian Statutory Commission, saw to it that it became a useful red-herring which preempted the attention of informed, or at least concerned, observers and provided a formula round which a consensus of British political opinion could be carefully engineered.

This is an interesting and well-documented study which instructively informs about a significant strand in the complex currents and under currents in British-Indian politics during the interwar period. It is welcome.

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The North-East India: Land, Economy and People By R. Gopalkrishnan, Vikas Publishing House Pvt. Ltd., New Delhi, 1991, Pp 257, Price Rs 395/-.

This book attempts to bring together the various geographical and economic aspects of the north-eastern part of the country comprising the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. The book is divided into five parts. Part I has two introductory chapters giving in brief, the geographic perspective of the region and the evolution of the seven States and their administrative and political complexities. Part II, called the 'Regional Configuration' discusses in three chapters the geological and physiographic divisions, climatic factors as well as the surface features of the region. The predominant features of the region are the Himalayan mountainous areas of the north, mainly in Arunachal Pradesh, the eastern hill regions of Nagaland, Manipur, Mizoram and parts of Tripura, the plateau area of Meghalaya, the Brahmaputra and Barak rivers in Assam and Manipur, respectively. These features have been accentuated by the heavy rainfall in the region which has been divided in the book to comprise (a) the cold humid monsoon climate in areas over 2000 metres ASL; (b) the wet subtropical monsoon climate of southern Arunachal Pradesh, western Nagaland, western Manipur and Mizoram; (c) the humid mesothermal with heavy monsoon rains in the Brahmaputra valley, Meghalaya and Tripura and (d) the mesothermal sub-tropical monsoon climate of southern Meghalaya. The vegetation in the region therefore varies according to its physical features and rainfall conditions from the temperate to the tropical and sub-tropical.

Part III deals with the people of the region, their population density, occupational pattern, age and sex composition, migration, rural and urban proportions, language and religion. This part discusses in greater detail the migration of different communities into Assam commencing with (a) labour required for the tea plantations who came from Bihar, Uttar Pradesh, Orissa and Madhya Pradesh since 1826 and until 1941; (b) the Muslim settlers from erstwhile East Bengal and subsequently from East Pakistan and Bangla Desh, who had started coming into Assam from 1901, (c) Hindu refugees from East Pakistan after Partition and Independence, and (d) migration from other areas, particularly Nepal. As a result, by 1971, nearly 58 per cent of the population in the State were non-Assamese speaking. More than 192 languages and dialects are spoken in the region. While Assamese, Bengali and Hindi are the predominant languages in Assam, and Bengali in Tripura, the spoken dialects in the hill States belong largely to the Austric and Tibeto-Chinese family of languages. Being largely rural in character, large town/city settlements are few in the region. The level of administration in the hill areas continues to be through village councils and community elders. The framework in the plains area is akin to the revenue administration available in most parts of the country.

The next section, Part IV, discusses the economy of the region. Agriculture is the mainstay of the people; approximately 85 per cent of the cultivated area is under mono-cropping. 'Jhum' or shifting cultivation is predominant in the hill areas while settled agriculture is in the plains and valley areas. The measures being attempted to modernise agricultural practices in the hill areas and the plains, as also the problems faced in the region, have been discussed. Paucity of irrigation, shifting cultivation, the small size of land holdings under settled agriculture, lack of adequate credit facilities are some of the factors mentioned for the low growth of agricultural production.

Despite the entire region having been declared as 'backward' for the setting up of industries, development has been tardy due to a number of factors. These include poor transport and communication facilities, lack of entrepreneurial skills, poor demand and marketing facilities. Albeit, the availability of the basic raw materials have facilitated the setting up of two petrochemical complexes and three oil refineries (in

Assam), three cement plants, four paper mills, four sugar factories, spun silk mills and plywood factories in the region. The tea industry has also been flourishing, mainly in Assam and to a lesser extent in Tripura. Village and cottage industries abound in the region. The book concludes with the need for a comprehensive development plan for the entire region.

There are a large number of spelling mistakes in the book..The statistical tables also require a second checking. For example, on pages 187-188 the table on "Production of Different Crops" is for 1982-83 and not 1902-1903 as mentioned in the book. Rice production figures as given in the source publication "Area and Production of Principal Crops, 1984-85" are different for 1982-83 from those given in the book for Assam, Manipur and Nagaland. Again on page 188, production figures for Tripura, Arunachal Pradesh, Mizoram and "Total" have been shown as those for Assam, Manipur, Meghalaya and Nagaland. Kharif cereals, particularly 'rice' have not been indicated at all for Tripura, Arunachal Pradesh and Mizoram, although rice is the principal cereal crop grown. Similarly on page 189, the area figures for rice in Tripura and Arunachal Pradesh do not tally with those in the source publication. These are only illustrations and one should need to check the figures for all the other crops too in these tables. It is a pity that the author has allowed the release of this publication, without a thorough checking.

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Seervai, H.M., *Partition of India - Legend and Reality,* Emmenem Publications, Bombay, 1989, Pp. 237, Price Rs 70/-.

History always needs re-writing when new facts come to light. H.M. Seervai, the noted legal expert, has attempted a re-assessment of the various personalities, the issues, the initiatives, the reactions, etc., which led to the partition of India; also whether partition could have been avoided. This he has done on the basis of the British records of the period, published between 1970 and 1983, a book by Dr. Ayesha Jalal on Jinnah, the 1988 edition of Maulana Azad's 'India Wins Freedom' and Rajmohan Gandhi's book on eight eminent muslims of the period, including Jinnah and Azad.

Seervai's assessment is, in short, that it was the Congress which, by refusing to accept the various proposals put forward to allay the 'genuine' fears of the Muslims, brought about the partition of India. Seervai gives us to understand that this assessment of his emerges from the new material available.

New facts must of course lead to new assessment; but any new writing cannot be treated as new facts. Let us take this portion from the preface: "Rajmohan Gandhi said Jinnah was right when he accused Congress of dishonesty over the Mission scheme". This statement contains no fact, but only an assessment of an assessment of assessment, i.e., Seervai approving of what Rajmohan Gandhi approvingly said about Jinnah's evaluation of Congress' actions.

If we avoid the pitfall of treating assessments as facts, and read Seervai's book carefully, we are likely to reach a conclusion opposite of that which Seervai has reached.

It goes without saying that at the heart of the whole political question, was the question of Hindu-Muslim unity. It is in relation to this question that all the personalities and events have to be examined. The most important personality was Mahatma Gandhi. Seervai has approvingly quoted the opinion of Jinnah and others that Gandhi ruined politics in India by introducing religion into it. Seervai has almost pilloried, on more than one occasion, Gandhiji's following statement, made in the late 30s, regarding Hindu-Muslim unity: "I wish I could do something, but I am utterly helpless. My faith in unity is bright as ever, only I see no daylight but impenetrable darkness and in such distress I cry out to God for light" (p. 21). Seervai also seems to agree with Rajmohan Gandhi's assessment that Mahatma Gandhi seemed to have lost faith in Hindu-Muslim unity after the mid-30s. All these assessments betray a confusion about what is introduction of religion into politics, what does an appeal to God signify and what is meant by faith in Hindu-Muslim unity. Gandhiji was, first

and foremost, a religious person and believed that not a blade of grass moves without God's will. His religion however did not consist of any particular dogma or any exclusivism. His religious beliefs and the actions based on them cannot be *shown* to have estranged the Muslims from the Hindus. In fact it was he alone who could to some extent check the communal madness of 1947. His appeal to God to give him light was only an indication of his clue-less-ness. Perhaps he had lost the faith in his ability to bring about that unity but that does not mean that he gave it up as a goal. Facts show that he did not ever relent in his efforts to bring about that unity.

Unity at what Price? - this was, at that time, the central question. Not only the theoretical aspect of it but also its acceptability by the people. The Muslims had overwhelmingly favoured the creation of a separate homeland for them. They refused to live under a 'Hindu Raj'. All formulae for Hindu-Muslim unity were therefore designed to deny to the Hindus the power which they could get in the natural course of things. There was to be a parity between the Muslims and the caste-Hindus leaving the Scheduled Castes and other minorities free to upset the balance. The powers of the Central legislature were to be diluted by having a minimal federation with a further handicap that any resolution on any major communal issue would have to be referred to either the British Government or to the Federal Court and lastly, a non-Muslim province like Assam or the whole of the Sikh community was to be compulsorily and arbitrarily kept under Muslim majority governments.

Eminent people like Sapru or Bhulabhai Desai or Azad obviously thought that the above price was worth paying. Other Congress leaders found this price excessive and preferred partition. The question as to whether partition could have been avoided is thus really irrelevant. Seervai has nowhere shown that the majority of Indians would have acquiesced in paying such a price for a nominal unity. Seervai has cited instances where the Americans and the British gave up theoretical correctness in favour of practical goals. These instances are also irrelevant. The American decision to allow slavery for some time was at the expense of the minority, not at the expense of the majority. Their decision to have equal representation for all their states, irrespective of the size of population, in their Senate, did not affect their power structure fundamentally; and in aiding Russia in the Second World War they saved their own blood at the expense of the Russian blood.

The last question is whether the Congress leaders behaved dishonestly with the Muslim League. Seervai has given no evidence to show that the Congress went back on any specific agreement. The Congress opposition to parity and to the compulsory grouping of provinces was made abundantly clear from time to time and its acceptance of the Cabinet Mission Plan was also made subject to certain interpretations (which the British Government did not refute for a long time) and with a declared intention to try to modify that plan in a democratic way.

The conclusion emerges that the Congress which was looking forward to the establishment of a modern egalitarian society, with its sovereignty resting in its people and not in the elitist politicians, preferred partition to a formula that would have perpetuated the then existing divisions in the society, a formula which in the words of Gandhiji was worse than Pakistan.

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Agricultural Development of India by A.R. Padoshi, Himalaya Publishing House, Bombay, Pp. 150, Price Rs 138/-.

This book is about agriculture in the state of Goa, Daman and Diu. It deals with the structure of land holdings, land use and cropping pattern, high-yielding rice, traction power for agriculture, agricultural labour force and NDP from agriculture. Although secondary data have been presented for most of these variables suggesting secular changes therein, the author has failed to grasp the dynamics of change. Thus, he does not explain why the area under HY kharif and rabi rice has been declining since 1985-86 and yet the

output of rice in both the seasons has been rising. There is no analysis of rice yield/ha or the factors contributing to increasing yield or the constraints to optimising the yield. Similarly, the author tells us nothing about cashew or coconut, the two most important plantation crops, together accounting for a larger share of the crop area than rice (Table 20).

In short, the title of the book is misleading for it neither deals with agriculture outside of Goa nor does it discuss "development" of agriculture in that state. The time series of statistics on paddy output from 1969-70 to 1984-85 (Table 28) has not been made comparable by converting rice into paddy or conversely. The absence of constant price deflator similarly detracts from the value of Table 2 which presents a time series on State NDP and agriculture's share in it. The survey of 150 farmers to collect primary data appears to be an opinion poll to solicit their views on adequacy of farm income and sufficiency of rice output from self-operated land for domestic consumption (Chapter VII). Finally, one may question the appropriateness of including human labour as a source of "draught power for agriculture" (Chapter VI) as also the use of the terms "agrarian economy" on p. 128 and "agrarian sector" on p. 5. The reader who expects to find an analysis of agricultural change in Goa in the context of the growing importance of tourism, mineral exports and inward remittances from migrant Goans may feel frustrated.

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ANNOTATED INDEX OF BOOKS AND ARTICLES IN INDIA

EDITOR'S NOTE

These abstracts are prepared by the author of each book/article sent to us voluntarily in response to our invitation through the Economic and Political Weekly. These cover publications after 1st January 1986. Only abstracts of books/articles so received are published. The index therefore is not exhaustive and complete.

The limit of 250 words and 100 words for abstracts of books and articles respectively is strictly enforced. Only a minimum amount of copy editing is done in order to bring the abstracts within the prescribed limits. The readers should approach the author of the abstract, not this Journal, for any clarifications.

BOOKS

1991

Hooja, Rakesh and P.C. Mathur, (Eds.), *District and Decentralised Planning*, Rawat Publications, Jaipur, 1991, Pp. xii+259.

The book examines facets of decentralised planning with special reference to the district. Both streams of thought, i.e. (i) one which views decentralisation as an end in itself and (ii) the techno-economic-administrative one which sees it as a means to more scientific and efficient plan formulation and implementation, are reflected.

The book provides a comprehensive introduction to various issues related to district planning efforts in India. While reviewing the evolution of the district planning concept and experiences in various States in the last few decades, the book has touched on aspects like the role of Panchayats, Pilot Project on Rural Growth Centres, the Hanumantha Rao Report, Agro Climatic Regional Planning, the 1969 Planning Commission Guidelines, the mandi area concept, the concept of a distinct district sector and of "untied" or "free" funds for districts, the place of the district in a multi-level planning framework, resource mobilization, demarcation of responsibilities between Centre, States and districts, spatial and area planning techniques, the question of bureaucratic and political will, need for developing planning skills and data basis at the sub-district levels, the existing sector based planning system, DRDA planning, embryonic district planning, problems of vertical and horizontal integration, peoples participation and removal of economic disparities between areas and between groups of people, etc.

1992

Mani Sunil, *Foreign Technology in Public Enterprises*, Oxford and IBH Publishing Co. Ltd., New Delhi, 1992, Pp. xx+254; Index.

Government had assigned an exclusive role to the public sector particularly in areas of complex and high technologies. This could be because of the capital intensive nature of production as well as the reliance on foreign know-how. Given the fact that market for most such technologies are highly oligopolistic in nature, public sector which has the backing of the state is believed to be having a better bargaining power. Second, not driven by the profit motive the sector is also charged with the responsibility of enhancing the country's quest for technological self-reliance in these sectors. The purpose of the book is essentially to analyse these issues in a systematic manner through a series of macro and micro exercises.

The macro exercise analyses in detail the economic conditions under which Indian public enterprises purchase technology from abroad. For this purpose, a detailed time series data on the direct cost of technology import incurred by these enterprises during the period 1973-74 through 1984-85 is developed. An examination of these costs shows that it accounted, on an average, about a third of the total payments for foreign technology incurred by the industrial sector as a

whole. Second, the incidence of restrictive clauses (viz., the indirect cost of technology import) have also increased during the period. Nevertheless when the elasticity of in-house R&D expenditure of these enterprises with respect to the cost incurred in purchasing technology was analysed, it worked out to greater than unity implying thereby that the propensity of these enterprises towards hastening the process of self-reliance has increased. This result which was obtained for the sector as a whole showed substantial variations within the sector, thereby implying the need for examining the issue at a much more disaggregated level. And this forms the theme of the case studies.

The case studies are conducted at two levels; first by selecting an industrial group in which public sector played a dominant role, viz., telecommunications equipment sector and second a set of two enterprises which occupy an important place in their respective industries, viz. HMT from the machine tools and Electronics Corporation of India (ECIL) from the electronics industries.

ARTICLES

1986

Hooja, Rakesh; 'Conceptual issues of Public Administration and Productivity in India - The Search for the Concept of Administrative Productivity' in Ramesh Arora and P.C. Mathur (Eds.) *Development Policy and Administration in India*, Associated Publishing House, New Delhi, 1986.

The article examines the question of whether, in the Indian context, the concept of productivity is at all capable of being relevantly applied to the field of public administration. The impact of public administration on productivity in various sectors and especially the agriculture and rural development sector, as well as productivity within the administration *per se* have been considered alongwith a brief review of the extent to which the productivity concept was being applied in the implementation of the New Twenty Point Economic Programme. The concept of Administrative Development is also examined.

1987

Hooja, Rakesh; 'Are Development Studies Irrelevant - Bauer and the Free Market v/s State Intervention Debate' in *Administrative Change*, Vol. 15, No. 1, July-Dec., 1987.

This article is an Indian reaction to the writings of British Economist P.T. Bauer, who has been treated as representative of writers who disparage development economists and regard the free market as an effective and desirable social choice mechanism which they claim is better than conscious developmental efforts. Bauer's emphasis of a totally limited role for Government has been questioned keeping in view that both the market mechanism and planning can be imperfect. Accordingly it has been felt that every thing can not be left purely to market forces - though the degree of state intervention considered desirable can be debated.

1990

Hooja, Rakesh; 'Regional and District Planning - why and How' in Hoshiar Singh and D.P. Singh (Eds.) *Indian Administration - Current Issues and Problems*, Aalekh Publishers, Jaipur 1990.

After examining the need for regional and district planning within a multi-level planning framework, the article compares sectoral planning, rural development (or DRDA) planning and embryonic district planning in India. Types of planning in a multi level framework, prerequisites for such planning, and various Indian initiatives in district planning from the initial days of Community Development to the present have been enumerated with special reference to the Hanumantha Rao Report on District Planning (1984) whose main features have been summarised and some important recommendations discussed. Operational problems being faced in district planning have been analysed and the author's views about embryo or guided district planning, that he thinks would be necessary in the initial few years, set forth.

Hooja, Rakesh; 'The CAD Organization for IGNP - Some Descriptive Comments', *Rajasthan Journal of Public Services*, Volume III, No. 2, July-December, 1990.

The article, a summarised version of a Paper by the author, indicates as to why a study of Command Area Development Authorities (CADAs) in Rajasthan is useful since a 1990 Government of India Task Force, and a 1978 A.S.C.I, Hyderabad study, both praise the integration achieved in the Indira Gandhi Canal Project (IGNP). It then briefly describes the IGNP Project, its organizational structure, the composition of CADA and the powers of the Area Development Commissioner, and some of the important meetings conducted to ensure proper implementation of the Project.

Mani Sunil, 'Biotechnology Research In India, Implication for Indian Public Sector Enterprises,' *Economic and Political Weekly*, Vol. XXV, August 25, 1990.

The Paper presents a brief survey of potential as well as actual diffusion of biotechnology (BT) on various sectors/industries reported especially in the West. Against that background it presents a rather detailed survey of the nature of R&D Projects in BT going on at the various government laboratories and at the in-house R&D Centres of both public and private sector enterprises throughout the country. Much of the R&D projects are going on at specialised research institutes; projects on human health and agriculture accounts for the largest share, but the share of expenditure on them from the central sector R&D budget is negligible.

1991

Bowonder B., and Sunil Mani, 'Government Policy and Industrial Development, Case of Indian Computer Manufacturing Industry', *Economic and Political Weekly*, Vol. XXVI, No. 8, February 23, 1991.

The Computer Manufacturing Industry is one of the fastest growing segments of the Indian Electronics Industry, though it accounts for only a small segment of the larger electronics industry. The industry is a heterogeneous one with the hardware segment accounting for nearly one-half of the aggregate sales turnover. The paper analyses the structure and behaviour of the hardware segment in a comparative perspective by taking the case of the Japanese industry. The dimensions of structure considered are: concentration ratios; level of integration; and economies of scale, while the behaviour of the industry is discussed in terms of research intensity; import intensity; standardisation; and skill development. The period of analysis is the 1980s.

Hooja, Rakesh; 'Command Area Development - Development of Government Thinking About its Objectives and Components' in P.C. Mathur and Ram Kumar Gurjar (Eds.) *Water and Land Management in Arid Ecology*, Rawat Publications, Jaipur, 1991.

This article traces the evolution of Government's thinking about the Command Area Development (CAD) concept and components since the inception of the Centrally Sponsored Scheme in 1974. Changes of emphasis during the Sixth and Seventh Five Year Plans and in the Working Group for formulation of eighth five year plan as well as the recommendations of an A.S.C.I. Hyderabad study (1978), High Level Committee (1981), Task Force (1983), I.I.M. Ahmedabad study (1987) and Task Force (1990) are briefly discussed before the author sets forth his conclusions about what are the appropriate objectives and what should be the components of CAD. A multidisciplinary approach and emphasis on people (farmers and project managers) are advocated.

Hooja, Rakesh; 'Intermediate Level Planning with Limited Participation - The case of a CAD Project' *The Administrator*, Vol. 36, No. 3, July-September, 1991.

The article indicates that in a multi level planning framework, intermediate level planning between the State and District levels can prove useful. As a case study a comparison between district planning and planning for a Command Area Development (CAD) Project has been made with reference to the IGNP (formerly Rajasthan

Canal Project). The advantages of a district and of a command area as planning units have been compared with reference to the objectives of decentralised planning. Thereafter the organisation of CAD-IGNP and specially its Planning and Monitoring Unit and different types of planning (i) working out plan strategy, new activities and sub projects, (ii) preparing plan budgets, (iii) operational planning and implementation have been discussed and linkages with State and district planning enumerated along with a brief look at people's participation.

Mani Sunil, 'External Liberalisation and Import-Dependence', *Economic and Political Weekly*, Vol. XXVI, Nos. 27 & 28, July 6-13, 1991.

It is hypothesised that, by and large, the high growth rate of eight per cent registered by the manufacturing sector in the 1980s has been contributed by the freer attitude towards imports of both technology and commodities. The note attempts to measure the import intensity of the manufacturing sector. The year 1985-86 is identified as the period when the process of external liberalisation, peaked. Using that year as the cut off point and employing an RBI data set, the import intensity of the manufacturing sector for three preceding and three succeeding years have been estimated by employing three different indices of import intensity, viz., the net foreign exchange inflow rate, the import intensity rate and the direct cost of technology imports rate. The three measures used in the note would suggest that the level of import dependence, variously defined, has shown an increase in the post-liberalisation phase.

1992

Hooja, Rakesh; 'Government Responses to Interlocked Factor Markets' in Mohinder Singh (Ed.) *Rural Development in India - Current Perspectives'*, Intellectual Publishing House, New Delhi,1992.

Interlocked factor markets are defined in this article mentioning the two approaches to its understanding current in India and the reasons why such a relationship occurs. Some types of interlocking in the Indian context are categorized as relationships A,B,C,D and E and some possible consequences of such interlocking are discussed. Governments responses to interlocked markets in India in terms of both comprehensive development policies and incremental development policies are discussed in general with reference to various developmental programmes as are government responses according to category of interlocking. The lack of a comprehensive integrated response by Government is regretted.

The Journal will publish in each issue Annotated Bibliography of Books and Articles on Indian Economy, Polity and Society, published after January 1, 1986. Authors are requested to send their entries with full details of publication and annotation not exceeding 250 words for books and not exceeding 100 words for articles. Use separate sheet for each entry.

BOOKS RECEIVED IN INDIAN SCHOOL OF POLITICAL ECONOMY

Bhatia, Sitesh - *Agricultural Price Policy and Production in India, 1956-1990*, Konark Publishers Pvt. Ltd, Delhi. 1991

The book presents a comprehensive review of the agricultural price policy pursued in the country over the last 35 years to highlight the lacunae in it before suggesting corrective measures. Based on the empirical data of farmer's supply response, a critical evaluation is made of the impact of price and policy changes on production in respect of five important crops. The book brings out the adverse effect that PL 480 imports had on domestic wheat production in the 1956-66 decade and the linkage between prices and production in the sugar, jute and cotton industries and the prices and production of sugarcane, jute and cotton crops.

Brunner, Jo'se Joaq'uin - *Investing in Knowledge - Strengthening the Foundation for Research in Latin America*, International Development Research Centre, Ontario, Canada, 1991

The book describes the training of human resources for research and development. It begins with an account of the advances and changes in scientific institutions in Latin America from 1960 to the present. The author presents and comments on the available quantitative data on training in the 12 countries covered in this study. He also analysis the personnel engaged in science and technology activities in these countries with special reference to one of the key variables in training: funding of higher education and of graduate and research programmes. In addition, he discusses such topics as the productivity of science and the scientific communities. He concludes by setting Latin America's efforts to build its own research and development structures within the world context.

Gokhale Institute of Politics and Economics - *Open Economy Macro-economics and its Relevance to India*, Gokhale Institute of Politics and Economics, Pune, 1991

The volume contains selected papers from a workshop organised by the Institute at Pune during March 15-17, 1990. The workshop was grouped under seven sub-topics, viz., (i) Exchange Rates, (ii) Empirical Analysis of Exchange Rates, (iii) Strucure of Trade, (iv) External Debt, (v) Macro-economic Policy and Adjustment Processes, (vi) Transmission of World Economic Fluctuations to the Indian Economy, and (vii) Implication of Recent Developments in the World Economy.

Sailaja, K. - *Fertiliser Imports of India*, Chugh Publications, Allahabad, 1991.

The book is a comprehensive study on the fertiliser imports of India. The major issues covered in the study include trends, pattern and direction of imports of fertilisers, estimation of import demand functions, import substitution in the Indian fertilisers industry and degree of self-sufficiency achieved in respect of fertilisers in India.

Shankar, Kripa - *Land Transfers, A Case Study*, - Gian Publishing House, New Delhi, 1990

With the enactment of land ceiling laws in a number of States in the country in the 1950s, agricultural lands have changed hands a number of times. The book examines land transfers in Uttar Pradesh, the magnitude of land alienation, its direction and the reasons of land alienation, as well as the manner in which the various classes/castes have been affected. Land transfers which were duly registered were taken into account. Land transfers by way of lease or mortgage were not studied as these were not final transfers.

Shankar, Kripa - *Product Diversification, Growth and Profitability in the Corporate Private Sector in India* - University of Bombay, 1991

The Study reports on the extent, magnitude, trend, sources and directions of diversification of the corporate private sector in India. It also examines the relationship of diversification with size, growth, profitability, age and the house of the firms. The findings are given industry-wise and aggregately. The Study assumes added significance following increased diversification by Indian firms in response to recent liberalisation policies of the government.

Soni, R. - *Leading Issues in Agricultural Economics*, Shoban Lal Nagin Chand & Co., Delhi, 1992

The book is divided into five sections and thirty chapters. Section I deals with the role of agriculture in economic development, farm organisation, land reforms, uncertainty in agriculture instability of agriculture, supply response in agriculture, agricultural price policy in developing economy, etc. Section II is devoted to the study of problems and policies concerned with the development of agriculture itself. Intersectoral issues are discussed in Section III. Section IV discusses issues concerning farm management. Selected problems pertaining to Indian agriculture, like the green revolution, land reforms, problems of small farmers, poverty, etc., are discussed in the last Section V.

Surjeet Singh (Editor) - *Rural Credit Issues for the Nineties*, Oxford and IBH Publishing Co. Pvt. Ltd, New Delhi, 1991

The book is a collection of background papers of the national seminar held at the Institute of Development Studies, Jaipur, on 'Rural Credit, Issues for the Nineties', which served as the basis for discussion and aimed at identifying the emerging issues and challenges during the nineties in the sphere of rural credit. It was argued that the financial viability of credit institutions was under question. The cost effectiveness of banking services in rural areas on terms of basic postulates of rural lending in the nineties was focussed upon. These included appropriate model for banks' operations in the rural areas, supporting systems and measures required for bringing in cost effectiveness in banks' operations.

World Bank - *Gender and Poverty in India*, World Bank, Washington USA, 1991

The Report documents that India invests far less in its women workers than its working men. Women also receive a smaller share of what society produces in terms of health care, education, and productive assets that could increase their returns to labour. Within an integrative framework that recognizes the cultural as well as the economic dimensions of women's situation, the report analysis the current role of women in Indian agriculture, dairying, forestry and the urban informal sector. In each case sector specific policy and programme recommendations have been made.

EDITORIAL CORRESPONDENCE

Respected Prof. Dandekar,

We happen to see the latest issue of your Journal in which you have published the copy of the letter which you had sent to us dated October 30, 1991, without our reply to the same letter. It seems that you have not received our letter, which we posted to you on November 7, 1991. Copy of this letter is enclosed herewith for your reference. Our letter is self-explanatory.

We want to inform you that previously we did not send the copy of our letter to the Editor of IJIR, because we wanted to personally convince you about your baseless accusation.

We are again emphasising that these papers which appeared in JISPE and IJIR are two different papers based on two different econometric exercises.

We hope you will publish our response to your letter dated October 30, 1991, along with this covering letter in the forthcoming issue of your Journal.

Dated: 14-2-1992.
Copy to Editor IJIR.

Yours sincerely,
(Sd-)Dr. V. K. Seth
(Sd-)Dr. A. K. Seth

Dear Sir,

We are in receipt of your letter dated October 30, 1991, in which you have levelled two different accusations against us. (A) That we have published the same paper in two different Journals namely Indian Journal of Industrial Relations and Journal of Indian School of Political Economy (JISPE), and (B) That we have written the papers just for earning money.

Regarding accusation (A) we want to emphasise that both the papers are based on two different academic exercises. In the paper which appeared in IJIR our exercise is based on time series study of labour absorption for different industries for the period 1960-1984. Whereas the paper which appeared in JISPE analyses the structural shift in labour demand function during three different sub-periods for major groups of Industries based on pooling of time series and cross section data. This difference can be illustrated with the help of differences which are apparent in equation (9) on which the paper in IJIR is based and equation (10) on which the paper in JISPE is based (se page 523 of JISPE). Moreover, the difference in the two studies can simply be observed by comparing the results reported in tables 3 to 7 of the paper which appeared in IJIR and tables 2 to 8 of the paper which appeared in JISPE. It will also be noticed by reading the two papers that the emphasis of the two papers is different. The first one, paper in IJIR, emphasises the labour demand in different industries whereas the other one emphasises the structural shifts in the labour demand during different phases of industrialisation. To emphasise these two aspects we entitled the two papers as (a) Labour Absorption in the Indian Manufacturing Sector and (b) Structural Changes in the Labour Absorption in Indian Manufacturing Sector. It was on your advice that we changed title of paper (b) which appeared in JISPE.

The accusation shows the carelessness with which the two papers have been compared.

As these two exercises are based on similar research and data base, therefore, similarities in the survey of literature and certain conclusions are inevitable, which might have led to the confusion. However, we do not expect such confusion on the part of learned scholars of your stature. We hope with these explanations, you must have realised that the differences in these two papers are not because of your editorial skill alone but it is because of the different contents and the emphasis which made them different.

We think that we have given you valid explanations to establish that the two papers are different. If you still find that the explanation is lacking, please do write to us again, so that, we can refund the money that you have paid to us.

Dated: Nov. 7, 1991.

Yours sincerely,
(Sd-)Dr. V. K. Seth
(Sd-)Dr. A. K. Seth

March 6, 1992

Dear Dr. Seth,

I have your letter dated February 14, 1992 which was received here on February 27, 1992. I am sorry that I did not receive your letter dated November 7, 1991 written in reply to my letter dated October 30, 1991. But, I am also intrigued that you did not give a copy of it to the Editor of the Indian Journal of Industrial Relations particularly when you knew that I had given him a copy of my letter dated October 30, 1992. Moreover, I am both puzzled and pained by the tone of your letter of November 7, 1991 if you were really replying to my letter dated October 30, 1991.

In your letter of November 7, you say that I have labelled two different accusations against you. (A) That you have published same paper in two different journals, and (B) That you have written the papers for just earning money. So I looked at my letter of October 30. I find that corresponding to (A) and (B), I have said the following: (A) As much as I can see, during this period (April 16 to September 9, 1991), you never informed me that you had also submitted your paper to the Indian Journal of Industrial Relations. I find this very surprising and, put it very mildly, contrary to all norms of academic behaviour.

(B) Unless you have any valid explanation, I think decency requires that you return the amount of Rs 1300/- which we paid for your paper. There is no accusation that you wrote your paper for money. I do not think that in India, and also abroad, academics write academic papers and publish them in academic journals for money. But, you will agree, that both here and abroad, some academicians publish more than one paper essentially using the same material and making some minor changes so that they have a longer list of published papers. This was the implication of my (A) above.

On the substantive question, you say that the two papers are different: that the IJIR paper is based on time series study of labour absorption for different industries for the period 1960-1984 while the JISPE paper analyses the structural shift in labour demand function during three sub-periods for major groups of industries based on pooling of time series and cross-section data. Further, you say that, to emphasise these two aspects, you entitled the IJIR paper as 'Labour Absorption in the Indian Manufacturing Sector' and the JISPE paper as 'Structural Changes in the Labour Absorption in Indian Manufacturing Sector' and that you agreed to changing the latter to 'Demand for Labour in Indian Manufacturing Industry: 1960-84' on my suggestion. If so, rather than agreeing to change of title, you should have brought the two aspects to my notice and informed me specifically that you had already sent another paper covering the first aspect to IJIR and given me a copy of the same. You will recall that you had agreed to the change of title of your paper in JISPE by your letter of July 29, 1991 while you had already sent your paper to IJIR on June 21, 1991.

When I saw the IJIR paper, I noticed that out of 12 pages of text, 7 pages (19-24 and 30) were common to the two papers. Comments on page 25 are based on Table 2 which is also included in JISPE paper. I thought that this was enough to seek clarification from you. You have charged me with carelessness and not comparing the two papers more thoroughly. I accept this charge. But, I suggest that if you had written only one paper, instead of two, it would not have taken more than three or four more pages of JISPE. I have given 13 pages to your paper, I could easily give a few more. But, for reasons best known to you, you chose to make two papers and send them to two different journals almost at the same time.

Howsoever different you may think the two papers are, I can assure you that, if I had seen a copy of your paper sent to IJIR earlier, I would not have published your paper in JISPE. The reputation of the Journal also is at stake because careless readers may begin to believe that the particular Journal publishes articles already published, or simultaneously being published, elsewhere.

As desired by yourself, I shall be willing to publish your letter of February 14, 1992 and the of copy of your letter of November 7, 1991 enclosed with it together with my letter of today. Of course, you have the choice of dropping the whole matter and forgetting about it all. In any case, you do not have to return the money I paid. I am sorry for the suggestion.

To place this matter in the current (Jan-March 1992) issue of JISPE, I shall need your decision at the earliest. Your home address does not take Speed Post. Therefore, as soon as you receive this letter, I shall appreciate if you will give me a call (337132) and convey your wishes.

With regards,

Copy to J.S. Sodhi, Editor, IJIR.

Yours sincerely,
(Sd-)V.M. DANDEKAR

On March 30, I received a long, respectful letter from Dr. Seths. In the following, I reproduce only the operative part - Editor.

Respected Prof. Dandekar,

We are in receipt of your letter dated 6.3.92. We received your letter on 14.3.92. We are sorry to learn that you did not receive our letter dated November 7, 1991. Had you received our letter, we think that a lot of controversy would have been resolved. But Sir, when no reply was received by you, you could have enquired from us whether we received your letter or not by simply drooping a reminder. This would have confirmed whether we replied to you or not. We wish that in future such a controversy may be brought on the print forum only when a confirmation is obtained.

As you have suggested in your letter that the matter may be dropped. We also do not want to drag this controversy any further, but since your letter has appeared in your journal and the well knit academic community around us has come to know about the controversy, they have already asked some question about the issue, we therefore request you to either publish a positive statement in our favour not affecting the reputation of the journal or publish the whole correspondence between us. We again in our faith leave the decision to you.

Dated: 26-3-1992.
Copy to Editor IJIR.

Yours sincerely,
(Sd-)Dr. V. K. Seth
(Sd-)Dr. A. K. Seth

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS

Vol. XLVI	**OCTOBER-DECEMBER 1991**	**No. 4**

CONTENTS

ARTICLES

Rural-Urban Growth Linkages in India	*Peter B.R. Hazell* and *Steven Haggblade*
Technology, Factor Demand and Substitution in Indian Agriculture, 1960-1983	*Satya Paul* and *Rajesh Mehta*
Developing Uncultivated Lands: Some Issues from Karnataka Experience	*M.V. Nadkarni* and *Syed Ajmal Pasha*
Under-Utilisation of Land in Andhra Pradesh: Extent and Determinants	*V. Ratna Reddy*

RESEARCH NOTES

Tenancy and Resource Allocation: A Review with Fresh Data	*Sankar Kumar Bhaumik*
Dynamics of Increasing Potato Acreage in Uttar Pradesh: An Inter-Regional Analysis of Farmers' Response	*S.S. Sangwan*
Flexibility and Reliability of Irrigation Systems and Their Effect on Farming - A Case of Punjab	*J.L. Kaul* and *Sukhjeet Sekhon*
Analysis of Area Decision in the Supply Response Model of Indian Tea	*B.C. Barah* and *T. Chiranjeevi*
Using Linear Programming Models for Generating Optimum Farm Plans - An Expository Analysis	*P.L. Sankhayan* and *H.S. Cheema*

COMMENTS

Agricultural Tenancy: A Discussion	*S.D. Sawant*
BOOK REVIEWS (see next page)	.. ..
REVIEWS IN BRIEF	.. ..
PUBLICATIONS RECEIVED	.. ..
INDEX TO VOL. XLVI, 1991	.. ..

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FORM IV

(See rule 8)

Statement about ownership and other particulars about newspaper (Journal of Indian School of Political Economy) to be published in the first issue every year after the last day of February.

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I, P.S. Palande, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Date: April 1, 1992

P.S. Palande
Signature of publisher