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# THE POLITICAL DYNAMICS OF GRASSROOTS ENVIRONMENT-DEVELOPMENT STRUGGLES: THE CASE-STUDY OF THE STRUGGLE AGAINST THE NARMADA DAM

Subodh Wagle

*The paper is divided in two parts. In Part I, a framework for analysis of struggles of local and rural communities against development projects is proposed and discussed in detail. In this part, the theoretical foundations of the framework, including the objective, underlying theoretical perspective, and various definitions and concepts, are described in the beginning. Then, the nature and importance of three primary components of the framework - a brief review of substantive issues, chronology and classification of main actors - are explained. In the final section, the seven-phase tool to analyse political dynamics of the struggles is discussed in detail.*

*In Part II of the paper, the struggle against the Narmada Dam is analysed using the framework presented in Part I. Following the pattern set in Part I, the discussion in Part II covers a brief review of issues, provides a brief chronology of events, and discusses classification of main actors. In the subsequent section, the political dynamics of the struggle against Narmada Dam is analysed in detail.*

## INTRODUCTION

In the current hoopla over '50 Years of Independence', often sponsored by a range of Indian and even multi-national companies selling their consumer products, there is hardly any place for honest retrospection and self-assessment. Nonetheless, if such an exercise is ever initiated, the most ignominious failure of this country in the last five decades is the failure of its so-called development policies, designed and implemented by experts, administrators and institutions to satisfy even the basic needs of all Indian citizens.

Beyond the world of these experts, administrators and related politicians who have been talking and thinking about development and implementing policies and programmes, there is a different world - the world inhabited by people living mostly in rural communities and urban shanty towns in India at whom the development is supposed to be targeted. In the current world-wide debate on development and environment, these communities are often treated as passive recipients of development and hapless destroyers of local environments.

However, from the perspective of most of these people, the history of development is largely a history of displacement and destruction. In the

name of 'development' and 'national interests' rural grassroots communities have been stripped of their rights over local natural resources that provide them with livelihood [Sainath, 1996].<sup>1</sup> In India, according to official figures, the total number of people directly displaced only by development projects is estimated to be more than 30 million [Mehta, 1994, p. 117]. An even larger number of communities have experienced indirect displacement due to development that gradually destroys their critical life support systems.<sup>2</sup> With their livelihood base destroyed, these grassroots people are then forced into urban slums in search of opportunities for survival. Thus, in the name of development, they are reduced to an army of urban unemployed and underemployed, forming the last and the most-exploited wrung of the urban-industrial system. Those who stay back in rural areas suffer the same fate at the hands of the rural elite who, using their increasing control over rural resources, continue to amass wealth. Often, the rural elite act as the agent of the urban-industrial system aiding extraction of natural resources owned by the rural communities under the pretext of industrialisation and development in the area. Thus, the large number of development projects - the dams, factories, power projects, irrigation canals, roads, and even cooperative sugar factories - acting as channels

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for this resource extraction, have benefited mainly the rural and urban elite, often, at the cost of rural communities.

As a result, resistance to projects and policies that are promoted in the name of development has become a regular feature of the political scene of independent India. The illustrative (not exhaustive by any chance) list of such controversial projects include: the Tehri dam in the hills of Uttar Pradesh, the Koel-Karo dam and Singrauli thermal power plant in Bihar, the Budg Budg power project in West Bengal, the Chilka Lake and Baliapal Firing Range in Orissa, aquaculture projects in coastal areas of Andhra Pradesh and Tamil Nadu, the Kali dam and Cogentrix power project in Karnataka, DuPont's Nylon plant and the Konkan Railway project in Goa, the Enron power project and Narmada dam in Maharashtra, the Cargill project in Gujarat, and the Sariska mines in Rajasthan. A wide range of natural resources nurtured, utilised, and controlled by local communities have been under threat due to these development projects: lands, rivers, forests, inland water-bodies, marine waters, etc. Some of these struggles have attracted international attention, but most have remained of 'local' concern. The most important common feature they share is that these struggles are rooted in the concerns of the communities that are threatened by the proposed development projects or policies. The concerns of local people are mainly focused on the threats posed by the project to the natural resource base in their surroundings (from which they draw their livelihood), their habitats, and their cultures. Unfortunately, these issues remain largely neglected in the discussions and debates on development in all the mainstream macro-institutions (legislatures, bureaucracies, judiciary, academia and media) in India. This neglect is worsening in the wake of uncritical acceptance of the so-called 'new economic policies' (NEP) by those macro-system institutions.<sup>3</sup> Hence, these struggles stand as the only significant challenge to development that has turned socially and environmentally destructive, and are the best hope for a sustainable and equitable future, especially for the rural, grassroots communities in India. This makes the study

of these struggles not just academically interesting but also critical for the future of environment, development and society in India.

Observing such grassroots struggles and analysing them is a difficult, and at times, frustrating task due to various reasons. First, most of these struggles remain unnoticed as far as media-persons, researchers and academics are concerned unless they erupt into violent and unfortunate incidents. Even when they become known, any documented information is simply not available, except some sketchy reports in the local newspapers. Second, when the struggle attracts lime-light many a time, the grassroots struggle is overshadowed by the opposition of other sections of populations who have their own grievances against the proposed development project or policies. Thus, the grassroots resistance is often subsumed in the development controversy that becomes the main focus of the attention of media and public. In such a development controversy, there are a large number of participants pursuing diverse agendas, acting from different perspectives/ideologies, forging coalitions and each making intense efforts to turn a controversy to one's own advantage. In this situation, it is truly problematic to paint a realistic picture of the grassroots resistance by making sense out of the conundrum of events and understand its dynamics that emerges from the actions and reactions of various actors. Further, in the absence of such a thorough understanding of any struggle, it is difficult to compare different instances of grassroots resistance and draw lessons from them.

## PART-I: THE FRAMEWORK FOR ANALYSIS

### THEORETICAL FOUNDATIONS

#### *The Objective*

The objective is to develop a versatile framework that is helpful for theoretical as well as applied purposes. For a researcher with theoretical interests, it should facilitate understanding of the otherwise confusing mosaic of events surrounding the controversial development project or policy. This requires an analytical tool which will help the investigator to place the events and actions of various players in



a coherent scheme so that an overall direction in which the grassroots struggle progresses could be discerned. At the same time, the framework should answer the concerns of an activist or of members of the communities threatened by development projects. In order to do so without losing its theoretical relevance, the framework needs to encompass different aspects of realpolitik including motives and strategies as well as strengths and weaknesses of various players, critical stages in the evolution of the struggle, and crucial decisions by the players and their timing.

Another crucial characteristics of the framework is that it should focus the analysis on the struggle waged by the grassroots community. In many instances, the initial feeble grassroots resistance snowballs into a full-blown controversy over the development project, and a large number of actors and players other than the grassroots communities get involved. These outside actors start fighting their own battles mostly at the state or national levels which have no connection or relevance to the concerns of the grassroots communities and their struggles. Because of the media attention these outsiders can command, and the political, judicial and other pressures they can exercise, their battles overshadow the resistance of the grassroots communities. In such situations, the framework should enable the investigator to focus on the grassroots struggle.

#### *The Underlying Theoretical Perspective*

It is helpful for the reader if the theoretical perspective underlying the framework is clearly articulated. This paper exclusively deals with the political dynamics of the grassroots struggles and is not dwelling directly on the substantive issues in the debate on development and environment. Still, the proposed framework for analysis of grassroots struggles is founded on a certain theoretical perspective on this debate which is articulated here.

The perspective underlying the proposed framework essentially views the debate on development and environment in terms of four standpoints on development: conventional, moderate or reformist, radical and grassroots or livelihoods. The conventional standpoint on environment and development emerged after World War II as the U. S. and Europe sought to stave off social instability and revolution in impoverished regions in the world. Locked in a geo-political contest with the Soviet Union for control of Asia, Africa and Latin America, the USA and Europe created development agencies and programmes to win over the newly liberated countries to the Western model of development and, allegedly, to dissuade them from becoming communist. An intellectual field of development theory and analysis quickly emerged to alternately define and rationalise Western efforts in this regard. This initial thinking on 'development' is termed here as conventional standpoint on development. While the conventional development model has maintained mainstream status for the last five decades, the reformist and radical standpoints have forced some changes in its doctrine and practice.<sup>4</sup>

The conventional development model relies mainly on modern science and technology, free-market economics, modernisation of societies, and Western-style organisation of the state.<sup>5</sup> In short, the conventional standpoint visualises development as transition of the erstwhile colonised countries from their '*traditional and pre-industrial*' stage to the '*modern-industrial*' stage.<sup>6</sup> In this model, the core of development process involves phenomenal increase in the productivity of economy through industrialisation. The surplus created by this productivity increase is to be invested in the development of industrial infrastructure in order to put these societies on the ever-expanding spiral of economic growth. Apart from this core component of economic growth, the model involves three other components. First, modern sciences and technology are expected to provide the necessary know-how, to make the dreams of eternally increasing productivity and economic growth possible. Second, alongside this transformation



in economic sphere, the traditional societies are expected to modernise themselves by adopting social structures, norms and behavioral patterns similar to those of the modern Western societies. Third, similarly, the traditional political and administrative systems are expected to give way to the modern nation-state controlled by the parliamentary representative democracy. Such is an expansive scope of the concept of development in the conventional standpoint.

Subsequently, the reformist and radical standpoints emerged as reactions to the theoretical shortcomings and practical failures of the conventional development model. Both are defined by their disagreement with certain aspects of the conventional development model, although there are significant substantive differences between the two standpoints. The reformist standpoint adopts a moderate theoretical position arguing that certain aspects of the conventional model, especially its neglect of environmental and equity concerns, have hindered the development process [Meadows, et al., 1972; Pearce, Markandeya and Barbier, 1989; World Commission on Environment and Development (WCED), 1987]. While the reformist perspective finds nothing essentially wrong with the core ideas and concepts of the conventional model, it sees the need for appropriate corrective measures to address the problems accompanying development, such as greater state intervention to ensure equity and social justice, and to monitor and control environmental damage caused by the conventional development strategies.

In contrast, the radical standpoint proposes that there are fundamental problems with the conventional development model and the practices that emerge from it.<sup>7</sup> These problems cannot be resolved through reform, according to the radical standpoint, because they stem from inherent contradictions in the idea and practice of development itself. If these problems are to be addressed, an entirely different development model must be followed. Though there is a near-total consensus on this basic diagnosis, the radical prescriptions are an eclectic mix of Marxist, Gandhian, ecological, feminist and

anarchist propositions. These include: the socialisation of economic relations, the institutionalisation of a vanguard to articulate a radical ideology, and the mobilisation of the currently marginalised elements of the world system to challenge the wealthy elite for control of resources and fruits of social labour.

According to the classification scheme, there is a fourth standpoint - the grassroots or livelihoods standpoint - which is distinct from these earlier three standpoints [Bandopadhyay and Shiva, 1987, 1989, 1989b; Gadgil and Guha, 1994; Taylor, 1995b]. The standpoint on development that emerges from the experiences of grassroots people whose livelihoods are under threat from development or have already been destroyed by development is identified here as the *grassroots or livelihoods standpoint*. In contrast with the three theoretical standpoints discussed before, the grassroots standpoint does not originate as a theoretical position or political rationale. It is rather defined by the experience of development by grassroots people. The grassroots standpoint has not yet been articulated in terms of either theoretical propositions or practical examples. It is, however, often expressed in the resistance of grassroots communities to development.

Concerns emerging from the grassroots standpoint are often confused with either the radical or reformist positions. While reformist tactics and radical challenges to the conventional paradigm may be espoused by leaders of grassroots resistance to development projects, there are very important distinctions between the grassroots standpoint and the other three theory-based standpoints.

There are two distinct features of the grassroots standpoint that need to be recognised as its defining characteristics. First, the vantage points of the three theoretical standpoints are located in the theoretical and macro-system contexts of experts, professionals, and their critics. But, the location of the vantage point in the fourth case is at the grassroots level where real, daily lives of people are threatened by the implementation of development projects. The conventional and



moderate standpoint, on the one hand, tends to either neglect grassroots communities or to look upon them as people who are yet to be 'integrated' in the development process, whereas, on the other hand, the radical standpoint tends to subsume the concerns and agenda of grassroots people under its own concerns and agenda. In this sense, the conventional, reformist, and radical theoretical standpoints tend to be 'vertical' in their view of grassroots people and their lives.<sup>8</sup> By contrast, the fourth standpoint is of a 'horizontal' type.

Secondly, the grassroots standpoint is the viewpoint of people shaped by the experience of development as a threat to livelihood and survival. In this sense, the grassroots standpoint is 'first-hand' and is 'grounded' in the lives of people. By contrast, the theoretical standpoints are rooted in, at most, abstract theoretical understanding of the grassroots situation. They are 'second-hand' or 'third-hand' accounts of the effects of development on life at the grassroots.

These important distinctions result in entirely different reactions of grassroots communities to development projects. In the 'vertical' and 'second-hand' view from the conventional, reformist and radical standpoints, the lives of the men, women and children living at the grassroots level are abstracted and categorised in 'sociological' and 'legal' terms. In contrast, the grassroots standpoint views these same men, women and children as fellow human beings having their individual and communal lives full of priorities, aspirations, apprehensions, norms, values and knowledge. Further, in the theoretical standpoints, domesticated and wild animals, horticultural and forest trees, and agricultural crops are seldom distinct and are, often, subsumed under the categories of 'flora and fauna'. From the standpoint of grassroots people, all of these surround them and hence are real, living, vibrant entities and, most importantly, supportive of human existence in the past, present and future. These elements of surrounding nature are then treated by grassroots communities as organic elements of a naturally based livelihood and, as a result, are often given individual names like human beings. Thus, for grassroots communities,

their fellow human beings, their physical and social contexts, and the nature surrounding them become real and valuable and, hence, it is impossible to sacrifice any of these in the name of abstract, distant goals of 'development' or 'national interests.' Rather, from this standpoint, all these become compelling and important causes that are worth struggle and sacrifice. From this vantage point, it is obvious that what is being destroyed by development projects may be small in size, but is very important and cannot be recreated or compensated for.<sup>9</sup>

The concerns of grassroots communities emerging from the threat to livelihoods, cultures, and the nature surrounding them can be addressed only by sustaining and strengthening all these important things. This is why, from the grassroots standpoint, resistance to development is not to win compensation, but to halt the project. This cannot be the commitment of the reformist standpoint which, instead, places faith in corrective measures like making changes in the project design, increasing compensation or shifting the project to some other site. Further, unlike the radical standpoint, the commitment of the grassroots standpoint to resist development is not rooted in theoretical or ideological commitments to a socialist, anarchist or other societal project. Rather, it is rooted in the experience of the destructive character of the conventional development, and of the value and importance of livelihood-based social practices and surrounding nature.

To sum up, currently the theory and practice of development is dominated by theoretical standpoints. The conventional development model has gathered substantial ideological, economic and political support. Yet, crises of development and environment remain pervasive in the developing world. As a response to the theoretical and practical failures of the conventional development standpoint, various theoretical formulations representing the reformist and radical standpoints have emerged sparking a vigorous intellectual and political debate. However, missing from this debate is the grassroots standpoint that is rooted in the lives of people threatened by development.

### *Definitions of The Concepts Used*

Four important concepts to be used in constructing the framework of analysis hereafter are defined in this sub-section in a detailed manner: the grassroots, the grassroots struggle, the macro-system, and the grassroots initiative.

As mentioned before, the term grassroots is used here to refer to rural people and their communities to indicate that they do not have any influence over decision-making process. Moreover, it is also used to emphasise that these people survive and earn livelihoods largely by depending on self-labour and skills, inherited knowledge, natural resources in surrounding areas, cultural traditions and social norms of the community.

The term grassroots enviro-development struggle is defined here in terms of three distinguishing characteristics: (a) it involves some political movement against a particular project or policy that is claimed to bring 'development' to some area; (b) more importantly, this movement involves resistance by a community or a group of people whose livelihoods, culture or habitat is/are threatened by the proposed development project or policy; and (c) most importantly, the livelihoods-related concerns of grassroots people are at the top of the agenda of the struggle.

The term macro-system is used here not to convey an idea of a cohesive, homogeneous or monolithic system guided by one single entity having and implementing its own well-articulated design. Rather, it means an ensemble of individuals, organisations and institutions that emerged from or are connected with the conventional development theory and practice. The macro-system is guided by a common epistemology and by a set of common norms, values, laws and regulations. Furthermore, its material base is created and nurtured by the economic and political systems that are products of the conventional development standpoint discussed earlier. These commonalities bind various

elements of the macro-system together to work toward an over-arching common purpose. In summary form, this purpose could be described as: more and faster economic growth at the macro-system level through maximisation of profit. The activities of the mainstream elements of the macro-system are directed at the achievement of this over-arching common purpose, despite contradictions and conflicts within and among themselves. This unity of purpose becomes evident especially when there is a serious threat to any of the basic or critical elements of the macro-system or when there is serious questioning of its foundations. In such situations, apparently unconnected elements can be seen coming together in defence of the macro-system.<sup>10</sup>

The grassroots initiative is defined as a well-coagulated alliance of individuals and organisations who set aside certain differences among themselves in order to address a shared sense of threat from development projects or policies.<sup>11</sup> The coagulation is achieved by arriving at an adequate level of concordance over objectives, principles and strategies through participation in the initial stages of the struggle. Within the grassroots initiative (henceforth referred to as 'the initiative'), there are adequately defined and properly functioning decision-making mechanisms and implementing structures that are largely dependent on the grassroots communities and independent of the macro-system. The grassroots initiative is distinguished from reformist and radical elements criticising and opposing the same project on the basis of two defining characteristics: (a) its first and primary commitment lies with the livelihood-related concerns of the threatened grassroots people and community, as well as the demands and agendas that emerge from these concerns; and (b) its *primary* source of strength is support from and participation of the threatened people and community in the struggle (reformers and radicals may be allies but are not primary actors or reliable sources of strength for a grassroots initiative).

THE COMPONENTS OF THE FRAMEWORK:  
PRIMARY COMPONENTS

The framework proposed here is based on the review of available literature on resistance by local/grassroots communities from different parts of the developing as well as developed world to development projects and policies. The available literature is largely of two types: first, case studies of instances of individual resistance to development projects, and second, analytical work based on such case studies. However, to author's knowledge, there has been no effort to evolve such a comprehensive framework to analyse the political dynamics of grassroots resistance.

The framework is structured here in the form of four components: (a) a brief review of the project and controversial issues; (b) the chronology of events; (c) the main actors or players that are directly or indirectly connected with the grassroots struggle; and (d) the phases of evolution of the struggle. The first three are called preliminary components mainly because they provide a foundation for the fourth component which involves analysis of the dynamics of the struggle.

As a context for analysis of dynamics of the struggle, a brief background description of the project details as well as the controversial issues and objections against the project is provided. The dynamics strategies, actions and reactions of various actors that are behind the actual events are closely linked to the support extended by these actors to various positions in the debate over substantive issues. Thus, the substantive issues and the dynamics of the struggle have close connections. Hence, a brief background review of the project and controversial issues is necessary to understand the events in the struggle.

The chronology of events is the second step in the analysis of the grassroots struggles. As mentioned before, the paucity of authentic documents and the lack of literature with organised information create confusion. Hence, in the initial stages of analysis a systematic chronology is an important tool. First, it provides an overall picture of the struggle. Second, it helps to discern certain patterns in the actions and reactions of various actors and, hence, to understand their underlying rationales.

The analytical framework views grassroots struggles essentially as a conflict between the threatened communities and the grassroots initiative on the one side and the macro-system agencies and institutions supporting the development projects on the other. There are other actors in the controversies pursuing their interests. However, actions of all other actors (including the macro-system) are seen in the context of their implications for the concerns and the struggles of the threatened grassroots communities. This approach of the framework helps focus the analysis primarily on the grassroots communities and their livelihood-related concerns. Following this approach, various actors and players are grouped on the basis of their interests and motivations.

Thus, in grassroots struggles several, if not all, of the following six major categories of actors are normally involved:

- (i) communities or groups of people whose livelihoods, habitats, or cultures are threatened by the project;
- (ii) activists and their groups working in collaboration with threatened communities in their struggle;
- (iii) the pro-project elements largely from the mainstream of the macro-system;
- (iv) reformers from within the macro-system who, for a variety of reasons, criticise and want to modify the project by changing one or more aspects of the controversial project or policy;
- (v) some groups or organisations, mostly from the fringes of the macro-system, who use the controversy to demand fundamental restructuring of the development paradigm and the processes involved and hence support the community and the grassroots initiative (these actors will be referred to as radical critics);
- (vi) regulatory or judicial institutions within the macro-system that are supposed to be neutral and act as arbitrators to sort out conflicts on different issues and on different levels (e.g., tribunals, courts, commissions, etc.).



It should be observed here that the six categories of actors described above can be aggregated into four groups representing the four standpoints: (a) the mainstream of the macro-system supporters and also the judicial institutions representing and defending conventional development standpoint [categories (iii) and (vi)]; (b) some elements from within the macro-system representing reformist standpoint [category (iv)]; (c) elements from outside or from the fringes of the macro-system representing radical standpoint [category (v)]; and (d) the threatened communities and some of the collaborating activists representing grassroots standpoint [categories (i) and some elements of (ii)].<sup>12</sup> This categorisation will help identify the standpoints represented by various actors and examine their reactions to the concerns and standpoint of the grassroots communities.

#### ANALYSIS OF THE DYNAMICS OF GRASSROOTS STRUGGLES

The dynamics of the grassroots struggle is

viewed in this framework in the form of successive phases through which grassroots struggles against development projects would normally evolve. There are seven phases in this framework that are divided into three groups: formative phases, confrontation phases and decisive phases. Table 1 lists the seven phases aggregated into three groups and some of the major developments in the struggles during the phase. For 'the initiative', each phase represents a different stage of struggle requiring different kinds of resources, support-systems, skills and strategies. As can be seen from Table 1, each phase in the sequence represents a major step in the evolution of the struggle gradually moving toward culmination in the final phase. In the final phase, the initiative may be successful in forcing the macro-system to accept an alternative to the project that is, more or less, commensurate with the grassroots standpoint.

**Table 1: Seven Phases in the Evolution of Grassroots Struggles**

Group /Phase Name (1)	Major Development in the Phase (2)
<i>Formative Phases</i>	
1. Project Design and Consolidation	Macro-System completes all aspects of project design and consolidates the project politically. The grassroots communities are still in the dark.
2. Emergence of the Grassroots Initiative	From initial resistance at the grassroots level, a grassroots initiative-committed to the livelihood concerns - emerges.
<i>Confrontation Phases</i>	
3. Establishment of Credibility	The initiative has to struggle to establish its credibility and authenticity as well as genuineness of its concerns.
4. Agenda Setting	While the initiative struggles to expand the agenda to include its own concerns, the macro-system tries to narrow it down to minor project design or procedure related issues.
5. Eruption of Struggle	Both, the initiative and the macro-system, engage in intense struggle through debate and political action.
<i>Decisive Phases</i>	
6. Resolution	Under pressure, the macro-system accepts and initiates efforts for resolution of the struggle by appointing some arbitrating authority.
7. Search for Alternatives	The initiative demands implementation of an alternative that addresses the concerns and demands of the grassroots communities.

The last two components of the framework - the six categories of actors and the seven phases - are put together to make the framework more user-friendly. Table 2 presents the framework in a simplified matrix form with the two axes. While the seven phases are on one axis, the actors classified in six different categories are on the other axis of the framework. In analysing the actual struggles, the table helps identify the motives of the actors and their support to either of the two main adversaries: the threatened community and the initiative, on the one hand, and the macro-system on the other. Each cell in the table represents a set of actions by the particular actor in that particular phase. This table

also indicates whether actors in a particular category are typically active, not active, or moderately active in a particular phase. This simplified format can be helpful especially in the initial stage of analysis as a template to place the actual events at appropriate locations so that a consistent and coherent picture of the struggle under study could be created.

The following sub-section provides a detailed discussion on seven phases in the evolution of grassroots struggles that are divided into three groups: formative, confrontation and decisive phases.

**Table 2: The Simplified Matrix Form of the Framework**

Phase (1)	Threatened Communities (2)	Community Level Activists (3)	Radical Elements (4)	Mainstream Macro- System (5)	Reformist Critics (6)	Regulatory Institutions (7)
Project Design- Consolidation	Not Active	Not Active	Not Active	Active	Not Active	Not Active
Emergence of the Initiative	Active	Active	Modest Activity	Active	Modest Activity	Not Active
Establishment of Credibility	Active	Active	Modest Activity	Active	Modest Activity	Not Active
Agenda Setting	Active	Active	Modest Activity	Active	Modest Activity	Not Active
Eruption of the Struggle	Active	Active	Active	Active	Active	Modest Activity
Resolution Efforts	Active	Active	Active	Active	Active	Active
Search for Alternatives	Active	Active	Active	Active	Active	Modest Activity

### *Formative Phases of a Grassroots Struggles*

#### *1. Project Design and Consolidation Phase*

In this initial phase, project agencies (government and/or private) decide on the development project and its location. This is followed by preparation of studies on technical, financial, socio-economic and ecological aspects of the project.

This design process is also used as a means for consolidating the project politically. Substantial

effort is put into, devising detailed plans, calculating costs and elaborating benefits the project would bring to various elements within the macro-system. Through these exercises, many other institutions and agencies within the macro-system are gradually involved in the project. As a result, sizable sunk costs (some real and some notional) and equally large vested interests of influential elements within the macro-system are created even before the project is started. Through publicity and propaganda campaigns highlighting various benefits of the projects, goodwill for the project is sought among various influential elements of the macro-system

(viz., industry, political parties, bureaucracy, media and mainstream academia). The projected benefits and the goodwill, in turn, impart significant credibility and an aura of genuineness to the project and also to the pro-project lobbies. Conversely, equally substantial prejudices are simultaneously built against efforts to oppose the project even before the project is started and resistance is considered by grassroots groups.

During this period, typically, no independent scrutiny of the design and implications of the project is allowed to be carried out, other than those by the project agencies or by the consultants hired by the government and the industry involved. If some negative aspects are identified during these internal exercises, they are normally downplayed, and open-ended discussion is usually avoided. In such situations, utmost care is taken not to arouse curiosity or to attract the attention of members of legislative houses, media and other potentially critical organisations.

In this phase, labour unions, consumer and environmental organisations, academic and human rights groups, non-party political organisations, independent experts and professional associations, all having potential interest in the project, are only vaguely aware, if at all, of the project or its implications. Even if some of these organisations manage to receive project information, it is often so limited that these organisations are unable to arrive at concrete and well-substantiated conclusions about its implications. In the absence of such conclusions, the organisations are unable to convince their own constituencies or other organisations about the need to initiate action, especially when there are other well-established issues demanding priority on their meagre resources.

During this entire period, the local community either does not get information or is given a vague, but rosy picture of the benefits of the development project.<sup>13</sup>

## 2. *Emergence of Grassroots Initiative*

After finishing the first phase, project organisers typically initiate contact with the local community. For them, the issue is project location and site preparation. But from the grassroots standpoint, at stake is the very existence of the local community which is to bear the brunt of the direct effects of the development project. As the community begins to receive information, though fragmented and limited, inconsistencies and problems with the project proposal and its promised benefits may appear. When the community asks for more information and clarifications, evasive strategies are often adopted by the local functionaries implementing the project. This can arouse suspicion in the minds of the members of the local community. The community becomes disturbed and begins to voice demands in a more organised and forceful manner. Alarmed by these demands, local project functionaries may try to act swiftly and complete the initial tasks of taking over the land or moving people.

If community resistance surfaces and is sustained, under its pressure, local functionaries in charge of project, commit some mistakes. These may be in the form of revelations of critical information, exposure of some fraud or misbehavior on the part of project authorities or even some violent encounters between people and the local functionaries implementing the project. These glitches serve to galvanise a wider pattern of resistance by local people.<sup>14</sup> At this stage, the dividing lines are drawn and the project, the industry involved and the supportive government agencies are identified by the local community as adversaries. The community clearly perceives a threat to the livelihoods and survival of its members. Based on their common sense and historical experience, local people may arrive at the conclusion that the promised 'development boon' is not going to work for them and thereafter



begin to prepare for the subsequent struggle. In many cases, at this stage, the local community is still fragmented. Those who are going to be affected immediately or directly are convinced about their future and are ready for struggle, but many will not have decided about the struggle at this point and may fear the costs involved.

The project agencies, meanwhile, enlist the assistance of the local elite at the taluka (sub-district) or district level. This local elite includes the local bureaucracy, local contractors, traders and petty businessmen, local doctors and other professionals, local media and some local social work organisations. The local elite is rehearsed on the rosy picture of benefits of the development project and then encouraged to solicit community support. Local elite's support hinges on the extent of benefits the project will fetch for them in terms of contracts, advertisements, rents, donations, increased business, etc. If there are sufficient inducements, the local elite becomes invested in the future of the project.<sup>15</sup>

From within the threatened communities, some elements emerge as grassroots leaders during the initial process of putting forth demands and petitioning. These may be traditional leaders or other elements which are either politically more active or have a better understanding and more confidence in dealing with authorities from the macro-system. The efforts on the part of the community and its leaders to get more information and to question government actions creates political activity in the local area that has hitherto been relatively quiescent. As a result, parts of the local media along with some local political and other organisations may join in questioning the value of the project. As well, activists or small organisations from outside may also get involved in the local struggle and try to win the confidence of the community. Thus, some combination of the following actors emerges at the grassroots level working together in the initial stage of the struggle: elements leading the resistance from within the community; local, i.e., *taluka* level, elements having good rapport with the community; and outside organisations or groups of individuals. A grassroots initiative coagulates

from among these actors through a process of working together and participating in a common struggle.

As the initiative coagulates in the form of a homogeneous organised resistance, it intensifies efforts to mobilise local people into a more vocal and visible political action leading to demands of more information and stoppage of the project work until the community's concerns are addressed. In response, the local project functionaries continue to block information and, simultaneously, attempt to speed up project work. This often results in further intensification of the local struggle and, sometimes, into a repressive and violent reaction from local functionaries. As the next step, while continuing the local political action, the initiative approaches higher level (i.e., state-level) institutions and bodies including 'autonomous' government agencies (such as pollution control boards, environment ministries, etc.), the courts, media, legislative houses, etc., seeking immediate intervention and/or relief.

In most cases, even if the initiative is successful in getting some additional media attention and in attracting activists and supporters, efforts to thwart government actions are often frustrated in this initial phase of struggle. This is due to the sizable resources mobilised *in advance* by the project's organisers, as well as the institutional bias of the macro-system to support such projects. As a strategy, the initiative may increase its efforts to create more awareness among various elements within the macro-system which could be sympathetic to its cause, get support from them, and involve them in the struggle. These macro-system elements may include: various state-level organisations, political parties, media, consumer organisations, labour unions, lawyers' groups, non-party political organisations, etc. This essentially means taking the struggle - which until then was outside or on the fringes of the macro-system - 'inside' the macro-system. It requires a considerable effort on the part of the initiative and its supporters to convince these macro-system oppositional organisations to spend their meagre resources for the cause of the community. This itself is quite a difficult task for the initiative as

there are many other equally pressing issues and controversies competing for the attention and resources of these organisations. In many cases, the initiative is not able to break through this barrier and, in the meantime, the local project functionaries are successful in completing the initial critical tasks and in pushing the project ahead.

### *Confrontation Phases of a Grassroots Struggle*

#### *3. Establishment of Credibility Phase*

If the grassroots initiative and the activists and organisations supporting it are successful in their efforts to take their battle 'inside' the macro-system, then a struggle in a concrete sense begins to form. There is a good chance that local, state, national and international organisations may already have raised some reformist or radical objections and have formalised their opposition to the project *within* the macro-system, such as in the courts, legislative houses, government agencies and other official as well as professional forums. In that case, these organisations and the initiative may come together and evolve a collaboration.

In the earlier phases, the typical response of the macro-system was in the form of denial of objections against the project and (if alleged) of wrong-doing on the part of the project functionaries. This response is often coupled with emphatic reassertions of the benefits of the project and its indispensability. However, once the confrontation is brought 'inside' the macro-system, mainstream elements supporting the project usually have to abandon such dismissive tactics and begin to provide information as well as clarifications and explanations. In this situation, the macro-system seeks to portray its own position as rational and balanced and to raise doubts over: (a) the genuineness of the grassroots complaints, objections and concerns; (b) the credibility of the grassroots initiative and its allied supporters; (c) the authenticity of the claims of the grassroots initiative as the representative of the community and its interests.

In this phase, the macro-system intends to simultaneously establish its own credibility while seeking to undermine that of the grassroots initiative. One step in this direction is for the government and other pro-project elements to initiate propaganda campaigns at local as well as state and national levels. Using the media (television, newspapers, pamphlets, etc.), efforts are made to flood the public with information and analysis that is positive about the project. Sometimes modest 'corrective measures' which respond to non-threatening objections are announced. These may help divert attention away from the more fundamental issues raised by the community.

Questioning the credibility of the grassroots groups and their supporters often follows thematic lines such as: (a) calling grassroots leaders and supporters rabble-rousers and self-serving lobbyists; (b) accusing these oppositional elements of misinterpreting facts and data (either out of ignorance or bias); and (c) suggesting that at least some of these elements harbour subversive ideologies or interests (e.g., calling them 'Naxalites,' radicals, anti-development extremists).

In order to effectively challenge the authenticity of the opposition, the macro-system will accuse the opposition of misleading and inciting passions of some gullible sections of the local community. The macro-system will also seek to identify segments of the local community who are presented as desiring the project and are convinced of its benefits. To prove this point, political activities are organised on behalf of certain people and organisations who claim to be local. In some cases, new pro-project non-governmental organisations are formed in order to counter the threat posed by the grassroots initiative. Since the latter derives certain sanctity and credibility from the support of voluntary (non-profit) sector, the former are expected to challenge their credibility.

The grassroots initiative and its supporters must respond with a strategy to establish their credibility, the genuineness of their complaints and the authenticity of their claim of being representatives of the community. To establish

the genuineness of their complaints, the grassroots initiative and its supporters often initiate formal or informal inquiries as well as independent research and analysis of various issues (technical, financial, ecological, legal, etc.) involved in the controversy. To substantiate their role as representative of the threatened community, the grassroots initiative and its supporters may organise political activities with participation of members of the community at the project site, at the nodal locations in the region, and at state and national capitals.<sup>16</sup> The supporters and sympathisers of the protest contribute to these efforts by motivating their constituencies to organise some political action to support the grassroots initiative and its demands in their respective areas of operations. Finally, to counter the efforts of the macro-system to discredit them, the community, its leaders, activists and supporters wage a counter-attack on government's credibility by citing past records of similar projects and by seeking direct attention to the vested interests of politicians and bureaucracy that support the project. However, it is very difficult for grassroots organisations to question the credibility of various agencies and institutions of the macro-system from *within* the macro-system itself.

There are several reasons for this: (a) One of the main sources of power of the macro-system is credibility of its core institutions (government, courts, its knowledge-system (science and technology), professional bodies, etc.). Members of the macro-system draw their strength, sense of security and even sense of righteousness from the reputation of these institutions as objective, rational, impartial, benevolent and just institutions. Although at any point of time, various government agencies may have lost credibility, other institutions (such as courts as well as scientific and professional experts and their bodies) still are held in high regard by most of the members of the macro-system. Many sectors of society will likewise accord credibility to some part of the macro-system, for no other reason than to assure a degree of stability and order to collective affairs. (b) The government and the other related macro-system agencies arrive on the scene

with their role as 'authentic' and powerful institutions of development well-established. This power and 'authenticity' provide the necessary legitimisation to the underlying rationale as well as practical implications of the project these agencies sponsor. The legitimisation, in turn, provides indirect justification to the evasive, repressive and, often, violent tactics employed by the project organisations and the supporting state. (c) Because the grassroots initiative must, at least initially, pursue its challenge from 'inside' the macro-system, the activists and supporters, for a time, have to express their acceptance of the credibility of some institutions of the macro-system. In doing so, they have to abstain from raising fundamental objections and from doubting the credibility of these macro-system institutions. For example, in their effort to seek justice from the courts, grassroots groups forfeit, for a time, the option of questioning the fundamental prejudices of the legal system. Similarly, in seeking relief from the legislative houses and their members, they must accept, in some measure, the authenticity of these bodies as political representatives of the society. (d) Taking the struggle 'inside' the macro-system also involves acceptance, on the part of grassroots groups, of the 'rules of the game' set by the macro-system which, in many ways, are prejudiced against them. For example, any effort to approach legal or other government institutions for relief can prove to be a big burden because the legal system sets the onus of providing evidence of injustice on the victim. This requires a lot of procedural paperwork in jargon-laden and esoteric language as well as evidence involving complicated techno-economic issues. Most grassroots groups do not possess resources to carry out this task, whereas mainstream macro-system institutions have departments created specifically to carry out these functions.

In spite of these daunting hurdles, the grassroots coalition is sometimes successful in establishing its credibility, the genuineness of its complaints as well as its authenticity as a representative of local people. In this situation, grassroots groups are then able to force the government and other related agencies in the macro-system to take due



cognizance of their demands and enter into dialogue with them. However, the macro-system may successfully keep open questions regarding the credibility and authenticity of the grassroots initiative and its supporters and then raise them on some suitable occasion later. Instead, once the grassroots leaders accept fully or partially the credibility of some institutions or principles of the macro-system (e.g., its science or its courts), then it becomes very difficult for them to retreat from these positions even if they suffer due to the prejudices of these institutions. This is especially true when the grassroots initiative relies heavily on supporters from within the macro-system.

#### 4. Agenda Setting Phase

If grassroots groups are successful in establishing their credibility and authenticity as well as genuineness of their cause and force the macro-system agencies in engaging in debate, then the next strategy of the macro-system is to set the agenda for the debate as narrowly as possible. Efforts are made by the macro-system to project the struggle essentially as a dispute over some minor problems in project design, implementation procedures or institutional mechanisms. It is then implied that these minor problems can be addressed by making modest corrections or by streamlining the design, procedures or mechanisms. The grassroots, concerned with the threats posed to the lives, livelihoods and future of a community, reject such narrow definitions. Instead, they demand either a fundamental review of the project or press for total cancellation of the project by questioning the very rationale of development underlying the project.

But, frequently the community is compelled to accept the limited relief (commensurate with a narrow definition of agenda) offered by the macro-system and must interpret this as a first-stage victory. The strategic position of the grassroots initiative and its supporters *vis-a-vis* the macro-system is certainly weakened, at least temporarily, if the community accepts such limited changes based on narrow definitions of the problem. Nonetheless, if the grassroots still

possess resources and the wherewithal to continue the struggle, then there are many opportunities to raise anew livelihood issues.

Many times, out of sheer insensitivity, overconfidence or arrogance, the macro-system refuses to grant even modest changes. Or, in some cases, even if the change is granted on paper, measures are not properly implemented. In such cases, frustrated and infuriated by efforts of the macro-system to avoid even minor issues, the community re-emphasises its broader agenda while the macro-system continues to try to keep it narrow. This struggle for expansion of the agenda can go through various stages.

The Agenda Setting phase is also an educational phase for some activists and supporters of the grassroots initiative. Many of them, until this stage, have yet to fully grasp the rationale and import of the grassroots standpoint and of the fundamental questions that emerge from it. Until this stage, many in the grassroots camp remain satisfied with the reformist or radical interpretations of the situation. Through debate and especially through a process of answering criticisms of their positions and arguments, members and supporters of the grassroots initiative become aware of the distinctness and strengths of the grassroots standpoint. This education acts as the preparation for intense debate and struggle in the next phase.

The grassroots camp is sometimes successful in expanding the agenda of the debate to include more fundamental environment and development issues from a grassroots standpoint. In that situation, they confront another set of problems: (a) If the agenda of the debate is expanded, the macro-system - faced with serious problems in engaging the debate - tries to win the battle at the local-level by reacting aggressively and even repressively to the political actions of local people. Though in many cases the struggle does not collapse, any repression at the grassroots-level takes its toll in weakening the growing struggle. (b) It is easier to win battles with the macro-system on reformist issues that require usually modest changes. These issues are best suited for

debate before the courts, autonomous government institutions and professional bodies which essentially are the macro-system institutions. But with the expanding agenda, more fundamental issues are raised, as the grassroots initiative questions the development rationale underlying the project, the use of repressive tactics and the costs borne by the community. In this situation, the same institutions from the macro-system simply fail to appreciate these fundamental issues and the supporting arguments put forth by the initiative leaders. This is mainly because fundamental issues fall outside the confines of institutional logic. Indeed, they can be subversive to the very existence of the macro-system. (c) As the agenda expands, the burden of providing justifications for arguments and claims by grassroots groups becomes increasingly stronger and difficult. Seldom are data, methodologies and previous studies available to substantiate grassroots arguments and claims. Research on fundamental issues is normally not supported by the macro-system because it can be used to challenge the macro-system. (d) As the agenda of the debate expands and as the articulation of a variety of fundamental issues takes place, there can be increasing disagreement and dissension among supporters of the grassroots initiative, especially those subscribing to the reformist or radical standpoints. Those who hold positions within the macro-system but who are grassroots supporters (at least initially) may find themselves in difficulties that pit their careers and professional futures against their grassroots allegiance. These organisations and groups (including academics, professionals and, perhaps, some politicians) often find the expansion of agendas into core concerns hard to accommodate in their usual discourse. (e) Even some activists, especially with reformist or radical backgrounds, within the grassroots camp may resist expansion of the agenda on strategic grounds. Some may feel that common people from within the macro-system as well as from its fringes would be alienated from the struggle as the expanded agenda may create confusion in their minds. (f) Expansion of the agenda can often lead to macro-system responses that are even more laden with techno-economic

jargon or with sophisticated conceptual frameworks, requiring the grassroots to counter with arguments that may seem arcane and academic. It is feared that this may alienate even the supporters from the struggle just because the debate becomes for lay people too arcane and difficult to understand.

### *5. Eruption of the Struggle Phase*

As pointed out above, if efforts by grassroots to expand the agenda to encompass more fundamental questions are successful, then that success itself may cause a new series of intense attacks from the macro-system. At this stage, the struggle erupts in the form of a vigorous and, often, vicious debate as well as intense and, often, violent political action. Various strategies are adopted by the contending parties in their attacks and counter-attacks. New issues and objections are raised and new information is brought to the fore by the grassroots camp. In a reaction, there are increased efforts to withhold and block the flow of information on the part of the government, the industries involved and the other pro-project agencies. Accusations of spreading misinformation are levelled by both parties. There are efforts to manipulate, derail or scuttle the debate as it sometimes becomes virtually a battle of accusations, claims and counter-arguments through various media and in different forums.

While the debate intensifies, political activity simultaneously erupts through various stages. As a reaction to this, the state machinery often engages in violent and repressive tactics to put down grassroots resistance. There can be tragic outcomes during this phase of intense struggle, sometimes involving loss of life which then has the potential of either inflaming or scuttling the struggle.<sup>17</sup>

This eruption of the struggle brings in new actors and elements that hitherto had not participated in the debate or actions related to the project. These new elements include reputed individuals, mainstream political parties, industries, governments of other countries, national and international non-governmental

organisations (NGOs), national and international media, multilateral agencies, etc. The battle on both fronts - debate and political action - aggravates and climaxes sometimes in very explosive agitation.

Continuation of the struggle in such a volatile state becomes too threatening for the macro-system which then prefers to move to the next phase - the Resolution and Compromise phase.<sup>18</sup>

#### *Decisive Phases of a Grassroots Struggle*

##### *6. Resolution and Compromise Efforts Phase*

If the grassroots initiative and its supporters can keep turning up the heat and maintain the eruptive phase for sufficiently long time, then the macro-system may initiate efforts to resolve the struggle. Naturally, the macro-system tries to choose or create arbitrating agencies for this purpose that are not dangerous to its own cause. In the process, government committees, expert committees, departmental review groups, etc., are created. However, if the image of the lead agencies of the macro-system has been tainted by this stage, new agencies that apparently have more autonomy and credibility are chosen or created for arbitration. Nonetheless, it must be noted that these agencies will always be from within the macro-system, and that these institutions as well as the individuals operating within them will be governed by the logic and assumptions of the macro-system. This fact poses obvious problems for the grassroots camp as it attempts to raise fundamental livelihood issues in the context of resolution oriented activities.

The two-pronged strategy of the macro-system during the resolution phase is: (a) to buy time to complete maximum possible project work, and (b) to wear down the initiative, the community and their supporters by forcing them to thin out their meagre resources over space and time. Buying more time to complete as much project work as possible means increasing all types of sunk costs to such an extent that the project becomes irreversible and indispensable on the basis of the criterion of 'economic rationality'.

And wearing down the community, to the extent that it is possible, provides the macro-system with a strategic resource advantage as compromise discussions ensue.

While the bureaucratic and complex process of 'resolution' is going on, the macro-system often insists that the grassroots camp suspend all protest activities. Of course, this demand is made usually while the macro-system continues to carry out project work at full speed. The complex and bureaucratic procedures during the resolution process also result in keeping the grassroots initiative and its supporters tied down to discussions with institutions and experts in the capital cities where these exercises are typically carried out. At the same time, the grassroots camp cannot afford to loosen their grip on the local situation where the macro-system is trying to continue with the project work and wean sections of the local community away from the struggle through a variety of means. The difficulties involved in fighting on these two fronts further thin out the meagre resources of the initiative, the community and their supporters. At the same time, these high-profile resolution efforts serve the purpose of the macro-system in another way. They help divert attention of the media and other organisations from within the macro-system away from happenings at the project site. At the site, the project work is carried out at full speed while resisting local people and activists can be subjected to harassment and repressive tactics.

While grassroots camp and its supporters seek to win battles in the resolution process, the macro-system keeps on employing various tactics to stall this resolution process.<sup>19</sup> For example, it neglects or rejects the reports and recommendations of the arbitrating committees and commissions if they are in favor of the grassroots position. All these tactics serve the purpose of wearing down the grassroots camp operating on meagre resource base. As a result, the resolution phase, if extended, can take a heavy toll on the resources of the grassroots camp and the fragile coalitions supporting it.



In practice, many struggles are settled during the resolution phase as it offers an opportunity for compromise among the parties involved. Sometimes grassroots camps choose not to fight for a broader agenda and accept compromises offered by the macro-system for want of resources and support. Equivalently, the macro-system, because of embarrassment from bad publicity, because of a sense of political threat from external or internal pressures or because of internal dissent, gives up and abandons the controversial project.<sup>20</sup>

If both parties manage to withstand the test of the two successive strenuous confrontation phases and if the battle remains undecided, then there is a possibility that the struggle will enter into the next phase - a search for alternatives. Thus, if the resolution phase is extended, both parties - having exhausted their tactics, and with reduced strength and their credibility at stake - move gradually towards the next phase.

### *7. Search for Alternatives Phase*

Proposals for alternatives to the project start emerging during the eruption phase itself. These proposals are, more often, rooted in efforts of the initiative and its radical and reformist supporters to counter the macro-system's claims about indispensability of the project or of its particular design to serve certain objectives. During the eruption phase, these proposals are intensely debated and criticised and, in the process, are refined further by their proponents. Though these proposals for alternatives gradually become major issues in the debate during the eruption phase, neither of the parties, at least publicly, endorses these proposals for strategic reasons, mainly, in order not to indicate their willingness to accept the 'compromise' solution.

But as the resolution process ensues, these proposals for alternatives acquire importance as both parties try to use them selectively to buttress their positions. Some of the proposed alternatives to the project are so attractive that individuals and organisations seeking change in the working and thinking of the macro-system try to rally around

such alternative proposals. Some proposals, if found convenient for their respective agendas, are endorsed publicly by either of the contending parties. As the resolution process gradually winds its way to a conclusion, the parties seeing the dead-end and the need to compromise start thinking seriously about alternatives that stand a better chance of securing wide-scale acceptance and that serve most of their own concerns. At the one end of the spectrum of alternatives is the possibility that the initiative and its supporters will be successful in forcing acceptance and implementation of proposals involving fundamental restructuring that responds to livelihood-related concerns. But this is a highly strenuous and much more difficult task for the initiative and its supporters than forging a compromise.

In many cases, grassroots struggle do not reach the decisive phases. Many die out or are settled in earlier phases, some even before shaping up as full-scale struggles. In many cases, the resolution process is scuttled or high-jacked while fundamental livelihood issues in the struggle remain unresolved. In some cases, the grassroots initiative and its supporters are so worn out that the macro-system, with a last push, wins out in the resolution phase. Only on a few occasions, are the grassroots successful in causing the macro-system to abandon the controversial project. No grassroots struggle in the post-colonial history of grassroots struggles against development projects in India has yet arrived at the final phase of search for alternatives.

### STRENGTHS AND WEAKNESSES OF THE FRAMEWORK

The framework for analysis developed here is capable of taking up the challenges described at the beginning of this paper. First, it defines the grassroots struggle in a precise manner and then posits it essentially as a struggle between the community represented by the grassroots initiative and the macro-system. This helps the investigator to delineate a broad and overall picture of the struggle out of the whirl of events, actors and actions. Second, the matrix form of the framework, described in Table 2, helps the investigator to understand various actions of the participants

in terms of their underlying objectives (represented by phases) and their broad motivations (represented by the categories of actors). This facilitates building a detailed, coherent and internally consistent scheme of interpretations. Third, through the sequence of the seven phases that finally leads to the Search for Alternative phase (in which the initiative might be successful in forcing the acceptance of the grassroots perspective), the framework provides the investigator with the means to analyse the evolution of the actual struggle to see how far it is successful in forcing acceptance of the alternative which is responsive to livelihood concerns. Fourth, by viewing and interpreting the entire controversy in terms of the battle between the initiative and the macro-system, the framework helps focus the inquiry on the actors engaged in the grassroots struggles, their actions and strategies, and the ideas and interpretations underlying their actions and strategies. This makes it possible to understand the grassroots standpoint. Finally, the framework incorporates in each phase various possibilities in which actual real-life struggles may evolve. This is expected to make the framework relevant to the ground-realities of the actual controversies and grassroots struggle. However, the framework can best be tested for its practical relevance when it is applied in analysing actual struggles.

Along with these strengths, there are certain weaknesses in the framework, especially because of its focus on the macro-system and the grassroots initiative. This emphasis risks creating an image of the 'macro-system' as homogeneous and monolithic. This is also true in case of the grassroots initiatives which may be misconceived as homogeneous organisations. As a result, the internal contradictions and conflicts within both, the macro-system and the initiative, might remain understated. In practice, however, these internal conflicts and contradictions can and do play a critical role in the evolution of the struggle. The grassroots initiative, especially in nascent stages, can benefit tremendously from playing up internal contradictions within the macro-system. On

the other hand, if the internal contradictions and conflicts within the initiative are not understood and acted upon properly, the initiative can crumble under the weight of its own contradictions.

#### CONCLUSION

To begin with, it needs to be made clear that though the framework is applicable to controversial development projects as well as policies, this paper is focused more on controversial development projects. Certainly, there have been equally important struggles over development policies which also need to be studied.<sup>21</sup> Apart from using it as an analytical tool, the framework may also be useful for diagnostic purposes as it would help analyse the strengths and weaknesses of various actors and their strategies in actual struggles. It can also be used as a tool for strategic planning as it will enable the leaders of a grassroots initiative to chart strategies that can steer it through various phases of the struggle without getting worn down and being forced to quit. In this regard, the framework may enhance the capacity of grassroots struggles to compel the macro-system to genuinely address the concerns of the threatened communities and, possibly, alter the course of development, at least in the region, in manners that are responsive to livelihood concerns of local people.

It must be noted that each phase in the framework is a struggle waged around a particular objective rather than a fixed, sequential 'stage of growth' of the struggle. Hence, in the case of actual struggles some of the phases elaborated in this framework may be extended, shorter or even non-existent. Some may recur, some may appear to be evolving simultaneously, and some may appear to drag on endlessly as the community involved cannot garner adequate strength and resources to force the struggle to the next phase. In many cases, some force or actor may successfully abort or scuttle the entire struggle at an early phase.

## PART-II: ANALYSIS OF THE STRUGGLE AGAINST THE NARMADA DAM

This section provides a detailed analysis of the struggle against the Narmada dam (hereinafter referred to as the Narmada struggle) using the framework described earlier. The first section briefly discusses the controversial issues in the debate over the Sardar Sarovar Project (SSP) to set a substantive context for the analysis of dynamics of the grassroots struggle. The second section presents a description of the main actors and a brief chronology of important events in the struggle. The final section seeks to understand the dynamics of the grassroots struggle.

### THE PROJECT AND THE CONTROVERSIAL ISSUES

#### *The Sardar Sarovar Project*

Building a dam on the Narmada river in order to trap a large amount of water that flows into the Arabian Sea is, in fact, a half-century old dream. The idea itself really belongs to the era immediately following Independence in 1947, marked by the monumental development projects called 'centers of pilgrimage' by the first Prime Minister of India, Jawaharlal Nehru. In 1961, Nehru himself laid the foundation stone for the Narmada dam.

The struggle against the Narmada dam, formally the Sardar Sarovar Project (SSP), has acquired international fame in the decades since its inception.<sup>22</sup> Narmada is the largest westward flowing river in India, coursing through three states in central and western parts of India - Madhya Pradesh (MP), Maharashtra and Gujarat. The project is comprised of a dam near the village of Navagam, the main canal, an irrigation network, a river-bed power house, a canal power house and transmission lines. The SSP itself is a part of the ambitious Narmada River Valley Development Plan - involving 30 'major', 135 'medium' (moderately-sized) and about 3,000 'minor' (small size) irrigation projects - with Navagam dam as the terminal dam.

The project involves a 138.7 meter high dam creating a large submergence area spread mainly in two states - Madhya Pradesh and Maharashtra. An equally ambitious aspect of the project is the main canal which is expected to carry water across the state of Gujarat crossing in its course the valleys of nine major rivers. The main canal is to be connected with a large distribution system submerging an equally large area.

The project has been portrayed as the 'life-line of Gujarat' as it is supposed to deliver precious water to the drought-ridden areas of North Gujarat, Saurashtra, and Kutch regions in the northern and western part of the state. Along with the irrigation and drinking water benefits, the project also involves generation of electricity. With these benefits come an array of costs. Apart from the construction-related actual monetary costs, the project involves environmental destruction and human suffering from displacement of a large number of communities. In fact, the Narmada controversy has gained celebrity status in large part because of the enormity, complexity and distribution of these costs. Table 3 depicts some salient details of the project.

#### *The Issues and Concerns in the Controversy*

The first problem encountered by the ambitious Sardar Sarovar Project was the dispute that broke out over sharing the water available in the river Narmada among the three states through which the river passes. In 1964, a committee headed by A. N. Khosla was appointed by the Government of India (GOI) to prepare a report on the issue. The Committee submitted its recommendations in September 1965 which called for construction of a 152 meter high dam holding 11.22 million acre-feet (MAF) of water. The Government of Gujarat (GOG) accepted the recommendations of the Khosla Committee, but the Governments of Maharashtra (GOM) and Madhya Pradesh (GOMP) rejected them.

As a result, the Narmada Water Disputes Tribunal (NWDT) was set up by the GOI in 1969 under the Inter-state Water Disputes Act of 1956. This Act accorded constitutional status to the

Tribunal and its award (decision). As a result, the award of the Tribunal was binding on all the parties involved and, according to the Act, the award could not be challenged on any grounds for a period of 45 years. After a decade of deliberations, the Tribunal reached a decision in 1979. Salient features of the decision were as follows: (a) water apportionment between the three states was stipulated at 9 million-acre-feet (MAF) for Gujarat and 18.22 MAF for Madhya Pradesh (Maharashtra was not allotted any water from the project); (b) the height of the dam was fixed at 138.7 meter (455 ft) with live storage of 4.72 MAF; (c) Madhya Pradesh, Maharashtra and

Gujarat were directed to share the power benefits in the proportion of 57:27:16; (d) Gujarat was granted permission to construct a canal at 118 meter (300 ft) height and irrigate 1.8 million hectares of land in the state; (e) of the 9 MAF of water allowed to Gujarat, 1.06 MAF was allocated for municipal and industrial consumption; (f) rough policy guidelines were also stipulated for rehabilitation and resettlement of families affected by reservoir construction; and, finally, (g) the Narmada Control Authority (NCA) was created to implement the decision of the Tribunal [Patel, C.C., 1995, p. 77].

**Table 3: Narmada Controversy: Background Information at a glance**

The River	Flowing through Madhya Pradesh, Maharashtra and Gujarat Length: 1,312 kilometer (km)	
The Valley	Length: 1,312 m Width: 75 km (average) Drainage Area: 98,796 sq. km; Rain-Fall: 112 cm (Mean)	
The Dam	Navagam, District Bhadoch, Gujarat Height: 138.7 m (full reservoir level) Reservoir Length: 200 km	
Irrigation System	Main Canal: Length: 450 km and Width: 250 m (maximum) Distribution System: With main and 31 branch canals. Length: 75,000 km	
Submergence	Due to Reservoir: 37,000 hectare (ha) of mainly forest land Due to Canal System: 80,000 ha	
Displacement	In Submerged Area: 1,00,000 people from 245 villages in 3 states (Gujarat: 19, Maharashtra: 33, MP: 193) In Command Area: 1,40,000 people, mainly from Gujarat On Downstream Side: Estimated to be in thousands	
Claimed Benefits	Irrigation: 1.8 million ha in 12 districts of Gujarat Drinking Water: For 40 million people in Gujarat Firm Power: 440 MW (initial), 50 MW (final)	
Cost Estimates	\$ 1.44 billion	Original plan estimate (1981-82 prices)
	\$ 10 billion	World Bank estimate (1994)
	\$ 13 billion	Estimate of the grassroots initiative (1995)

Sources: Fisher, 1995a; IR, 1992; Mehta, 1991; NBA, 1994; Patel, 1991; Patel, 1995.

While the dispute among the three states over sharing the Narmada water was resolved, other contentious issues remained unresolved and unaddressed. A core issue was the impact of the dam on local communities. Immediately after the Tribunal award was announced, there was agitation in the *nimad* (plains) area of MP. In 1983, tribal families from Gujarat affected by the dam

organised a rally in Ahmedabad, the capital city of the state of Gujarat. In addition to such grassroots protests, the Ministry of Environment and Forests (MOEF) of GOI also had raised certain objections against the project in the context of the environmental impact studies conducted for the project. Families from Maharashtra and MP affected by the dam organised in 1986 and, first,

demanding a better resettlement and rehabilitation (R & R) package and, later, started questioning the design of the project. Beginning in 1988, total opposition to the dam became the main programme of the local communities affected by the dam and activist groups working with them.

Issues raised in the Narmada controversy can be classified into the following broad categories: (a) resettlement and rehabilitation issues; (b) environmental concerns; (c) techno-economic issues; and (d) livelihood-related concerns. This section provides a brief description of the debate over these issues.

#### *(a) Resettlement and Rehabilitation Issues*

Development projects are known to affect large numbers of people by displacing communities and destroying habitats. These costs are justified in the name of 'development' and/or 'national interests'. The Land Acquisition Act of 1894 (amended in 1984), which is often used by the central and state governments to acquire lands for most of the development projects, is said to be draconian and drafted with colonialist intentions [Pereira, Sule and Mehta, 1994b, p. 19]. It stipulates monetary compensation, but does not hold governments responsible for the resettlement and rehabilitation (R & R) of those affected by the projects. There is no central law or act that determines or elaborates the R & R aspects of the development process. Neither are there central policy guidelines in this regard. In the absence of such guidelines, the R & R aspect is, predictably, neglected in the design of the project, leaving those who are adversely affected at the mercy of project authorities.

The debate over R & R aspects of the SSP is centered on the following: (a) who is affected; (b) what is fair, full and appropriate compensation; (c) and whether fair, full and appropriate compensation is possible at all in reality? Regarding the issue of 'Who is affected?', the NWDT had defined the victim through its award of two hectares of land to every 'land-owning' family to be affected by reservoir construction. Later, in response to grassroots protests and with the

intervention of the World Bank, the affected tribal families of Gujarat succeeded in expanding the definition of 'who' to include the 'encroachers', 'landless' and 'major sons' category [Patel, Anil, 1995, p. 187].<sup>23</sup> However, R & R policies in the states of Maharashtra and MP differed on this matter. In both the states, compensation was to be provided only to 'land-owning' affected families. Even in the case of Gujarat, a large number of people affected by the construction of canal and irrigation system as well as people living on the downstream side of the dam, who would be severely affected by the dam, were still not included in the category of 'oustees'.

The issue of what constitutes full and fair compensation is rooted in a widely accepted R & R policy principle that no one should experience a fall in living standard due to the development project. However, there are serious flaws in the understanding of policy makers in the state and central governments and in the other decision-making agencies about how people in rural and especially tribal areas earn their livelihood and maintain a certain standard of living. The government agencies do not consider many important facts in this regard that have been pointed out by the many studies (for example, studies conducted by the Tata Institute of Social Sciences (TISS) in this area) [TISS Undated]. First, these studies have established that there are hardly any 'landless' families in these areas, at least from the perspective of tribals who have farmed these lands for centuries. Almost all families in these communities have been tilling the lands in surrounding areas for several generations. After the British arrived, some of these lands were appropriated as 'public' lands by the British colonial government, while some were allotted to private individuals. As a result, some families have legal title to the lands they till, whereas some do not. Thus, the categories of 'land-owning', 'landless' and 'encroachers' are creatures of colonial administration that were maintained by the post-Independence central and state governments for their own convenience and understanding. Naturally, local peoples' understanding of land access is totally different from that of the

government. Secondly, these studies also established that the entire population in the area satisfies a significant portion of its livelihood needs from activities other than agriculture. For this, it depends upon a wide range of resources, including grass (for grazing), forest products (for family consumption as well as for market sale) and river products (water and fish mainly as a food supplement). Loss of these livelihood opportunities is not addressed in typical R & R packages offered by the government which provide land and cash only to those who own the land, without regard to family livelihood needs and desires.

Doubts about fairness of R & R policies were rooted in the central and state governments' poor track-records and callous attitudes towards families displaced by other development projects in the past [Sainath, 1996]. The Narmada project was handled from the outset in a manner that only heightened suspicion. For example, the state governments failed to complete studies about the nature and extent of impacts of the dam on the threatened communities in a timely manner. These studies were to be completed before 1981. Yet, the first master plan for R & R was hurriedly prepared by GOM in 1992 only when an Independent Review was commissioned by the World Bank [Patkar, 1995, p. 167]. The World Bank's Independent Review found that implementation of an R & R programme would, in all likelihood, fail in the states of Maharashtra and MP due to policy deficiencies, lack of available irrigable land, inadequate institutional commitment, continuous failure to consult with local people, etc. Further, in the opinion of the Independent Review, despite its claims to the contrary, Gujarat, for similar reasons, would probably not be able to resettle a large proportion of oustees from Maharashtra and MP [Morse and Berger, 1995, p. 373].

#### (b) Environmental Issues

The Narmada project authorities also failed to prepare complete and comprehensive environmental impact studies, and once again did not consult with affected people on ecological issues

and concerns. Despite many extensions, the studies which were expected to be completed before 1985 were not completed until 1994. Measures suggested in these completed studies did not adequately address the adverse impacts on the environmental systems [NBA, 1994, p. 35].

A major issue that has been hotly debated is the *pari passu* clause. The MOEF granted its clearance to the project in 1987 with the condition that the necessary environmental impact studies would be conducted *pari passu* (i.e., simultaneously with) the construction activity, and that these studies would be completed by 1989. However, according to critics of the project, the need to carry out environmental impact studies in the preparation stage of the project cannot be supplanted with *pari passu* studies because this would 'greatly undermine the prospect for achieving environmental protection' [Morse and Berger, 1995, p. 374]. Nonetheless, most of the required environmental studies are yet to be completed. In fact, in 1995, the Narmada Control Authority and the MOEF had to cancel conditional clearances given to the project and ordered the GOG to stop project work until the so-called '*pari passu*' studies are completed.

Another major environmental concern has been the project-specific approach adopted in the environmental impact studies. It was pointed out by critics that the cumulative impacts of the SSP along with those of other upstream projects need to be considered [Fisher, 1995a; Shah, 1995]. But concerns about cumulative and system-wide impacts were not incorporated into the environmental studies.

Additional environmental issues in the debate could be divided into three groups on the basis of the areas to be affected by the project: the catchment area, the downstream area and command areas to be brought under irrigation. In the case of the catchment area, submergence of about 13,774 hectares of forest is estimated. To satisfy the compensatory forest programme requirement (as compensation to the submerged forest) set by MOEF, the GOG is planning to take up afforestation programmes in the arid areas of Kutch. The



loss of forest on prime land in the Narmada valley, it is argued by opponents, will not be compensated by forests planted on arid lands [Patkar, 1995, p. 172]. Similarly, serious doubts are raised about the feasibility of implementation of the afforestation and catchment area treatment programmes which were drawn up without consultation with local people. Further, land and financial allocations necessary for implementing these programmes have yet to be committed.

In the case of downstream areas to the proposed dam, no investigations on the environmental impacts of the dam were carried out until 1992. Studies commissioned after 1992 are very limited in their scope. Many critics have expressed their fear that the dam will severely affect the fish and other river life in the downstream areas and possibly eliminate the livelihood base of the traditional fishing communities on the downstream side of the dam. But this possibility is not being investigated at this time [Fisher, 1995a, p. 34].

With regard to the command areas for irrigation, it is feared that, given the soil structure, there will be severe problems of water-logging and land-salinity [Fisher, 1995a, p. 34]. In addition, the possibility of health problems in command areas, including recurring malaria epidemics, have not been addressed at all in the design of the project.

### *(c) Techno-Economic Issues*

The SSP project has been the target of many techno-economic objections. The techno-economic debate, which has been raging for a decade, has many participants including scientists, economists, planners and activists from various countries. In particular, it created intense debate on issues involving the politics of knowledge. For example, how can activists and affected people effectively question the technical aspects of the project finalised by top scientists, engineers and their institutions. The debate exposed many prejudices in this regard. The pro-dam elements considered the conventional development approach indispensable and ridiculed the suggestions of grassroots groups that an

alternative paradigm of development be embraced [Dabholkar, 1990, p. 149]. On the other hand, anti-dam elements often took for granted that an alternative approach existed, was homogeneous and comprehensive, provides a complete remedy, and is ready for immediate implementation.

The major techno-economic issues debated can be classified into four categories: (a) hydrological issues; (b) issues related to benefit-cost analysis; (c) seismic issues; and (d) objections regarding the technical-scientific viability of the planning and design of the dam and other components of the SSP.<sup>24</sup>

The hydrological issues mainly pertain to the question of how much water is available in the Narmada. The NWDT finalised its award on the basis of an estimate of 27.22 million-acre-feet (MAF), whereas many experts opposing the dam and even the MOEF have concluded that there is far less water available in the river [Dharmadhikary, 1995, p. 139]. According to their estimates, water availability is less than 22.69 MAF (about 17 per cent less). This is an explosive issue because the estimates of the benefits of the dam critically depend on these estimates of available water. This issue has become so important that the Indian Supreme Court is now requested to give final verdict on the correct estimate.

The cost-benefit ratio (CBR) of the SSP is the most contentious issue in the debate. The norms set by the Planning Commission of India require that the cost-benefit ratio for such a project should be more than 1.5. In order to satisfy this norm, according to critics, cost and benefit estimates have been continuously juggled by project authorities. The first cost-benefit ratio arrived at by Tata Economic Consultancy Services (TECS) in 1983 was 1.84. But, this figure was arrived at without accounting for many of the costs involved in necessary environmental measures and R & R. Further this CBR has been maintained without significant change by project authorities, despite drastic revisions in the estimates of costs and benefits. Critics point out that the cost calculations made by the project authorities have always

neglected physical impacts and grossly underestimated many other costs.<sup>25</sup> To counter these objections, project authorities and their supporters argue that the benefits of the project are so overwhelmingly high that very high costs can be easily absorbed and the CBR could still be maintained at levels higher than required. In response, critics point out that estimates of benefits are based on non-existent or very limited information. Further, estimates of the major benefits - drinking water, irrigation, and electric power - are contested by critics who charge that estimates used by project authorities rely on *ad-hoc* studies that contain untenable assumptions.<sup>26</sup>

The issue of reservoir-induced seismic activity has been raised by many critics. The issue acquires special significance in the context of the earthquakes that beset the state of Maharashtra in the late 1960s when the Koyna dam in (district Satara) was completed. According to several critics, the SSP dam is being built in a zone of moderate seismic activity having some geological faults and fractures.<sup>27</sup> In the last two decades, there have been many small and powerful earthquakes in the area. The pro-project scientists argue that there is no statistically proven threat to the Narmada dam as a result of seismic activity in the area. According to them, even if there is some possibility of seismic activity in the region, this cannot be an adequate cause for abandoning the dam because strong dams capable of withstanding powerful earthquakes could be built. The critics and local people argue that building the strong dam is an irrelevant solution because if the reservoir induces earthquakes, even if the strong dam does not get burst, people residing in the area are going to suffer loss of property and lives due to crumbling houses, drying wells, etc. Thus, the reservoir induced earthquakes are going to affect local people severely.

Apart from these major techno-economic objections, critics have pointed out many instances of technical and scientific problems in the design and plan of the SSP project. These include: a lower rate of siltation originally assumed and a resultant overestimation in the life

of the reservoir; higher efficiency factors for the project's canals than can be reasonably assured; problems in assumed irrigability of the command area considering the soil conditions; and, overall a 'flawed and outdated' design [Shah, 1995, p. 339].

#### *(d) Livelihood Concerns and Questioning the Conventional Standpoint*

Along with the above objections to the project design, several issues were raised by grassroots groups and their supporters which question the paradigmatic assumptions underlying the project. Technical experts working with the grassroots initiative objected to the conventional standpoint in the irrigation sector that relies heavily on large and high-walled terminal dams. Precisely because of this inverted thinking, these experts argue, large physical structures are created which tend to be problematic and vulnerable, and which cause severe adverse impacts on the surrounding social and natural systems [Paranjape, 1990; Ram, 1995; and Shah, 1995]. Instead, these experts and the grassroots groups suggest a bottom-up approach for the irrigation sector in which development would begin from the smallest of the watersheds in the valley and gradually reach the terminal dam.<sup>28</sup>

During the initial phase in which questions about impacts and burden-bearing were raised, the grassroots initiative and its supporters came to realise that the main beneficiaries of the project would be rich farmers, industries and urban centers in South Gujarat. They also learned that the diverted water from the SSP would not reach the arid areas of North and West Gujarat until at least a decade after the dam was completed and possibly would never reach these areas considering that the political support of the project was based on interests of South Gujarat. The north and west areas might have been included to give the impression of widely distributed benefits flowing from the project. But the poor communities of these areas hardly provided the political muscle behind the project. This realisation prompted raising of many fundamental questions that

reflected livelihood concerns of local people and that climaxed in the demand nothing short of complete abandonment of the project.<sup>29</sup>

The agenda put forth by the grassroots struggle was comprised mainly of two elements: total opposition to the dam and demand for *paryayee vikas-neetee* (alternative development paradigm). The demand to terminate the dam was based on questions about the fundamental assumptions of the project that have direct implications for the development standpoint underlying the project.<sup>30</sup> These fundamental questions included questions about the viability of the project in terms of actual, immediate, tangible costs versus claimed, theoretical benefits. In particular, grassroots groups pointed out that the loss of livelihood by the destruction of habitat and the dispersal of local communities is a real, undeniable and significant impact of the project, whereas supposed benefits (irrigation, drinking water, etc.) exist, at best, as promises to be implemented by agencies which have historically failed to meet the needs and concerns of the affected communities. Pledges of transitional assistance (R & R) have a similar status of speculative, future benefits to be weighed against inescapable, immediate costs. Despite persistent demands on the part of the grassroots initiative, government agencies failed to provide satisfactory answers to these questions. Hence, the initiative concluded that the human and environmental costs of the project are too high and the local communities would have to bear the brunt of the burden and damage.

Beyond the issue of appropriateness of the project, the grassroots people and the initiative also raised fundamental questions about the conventional development model. These questions included: Was the cause ('development') for which the poor tribals and their environments were being sacrificed justifiable? And, if 'development' in its present form is, as its history suggests, inherently harmful to a large number of communities while benefiting only an influential few, then why not make fundamental changes in the goals and design of 'development' itself? The

second part of the agenda of the initiative - the struggle for *paryayee vikas-neetee* - is rooted in these questions.

The grassroots activists participating in the Narmada struggle raised such fundamental issues, elaborated the interconnections among them and wove them together into a comprehensive critique of the conventional development standpoint. The following paragraph, from the booklet published by the grassroots initiative, demonstrates the comprehensive understanding arrived at by the members of the initiative and their supporters through the process of struggle:

All the issues raised by *Andolan* [the initiative] are interconnected. They are rooted in one single system and strengthen each other. These issues have emerged in the context of prevailing political culture in India, increasing economic and social exploitation and inequality, destruction of natural resources, increasing centralisation (of economic and political power), capitalism and increasing consumerism. As a result, the tribal and other down-trodden sections are being deprived of their rights to natural resources while (as a country) we are being led into a foreign debt-trap. This conventional development paradigm also has political implications. This paradigm has caused acute centralisation in the entire system leaving no say for common masses, their organisations and their movements in the decision-making process. Decision about the remote areas of the country are being made from New Delhi and Washington DC. The resources owned by people are being appropriated by a small number of economic and social elite. Common masses are being incapacitated from deciding on their daily lives and they are forced into dependence on the others. The destruction of fundamental human rights starts from here [NBA, 1994, p. 4].<sup>31</sup>

The critique based on grassroots concerns of livelihood was not allowed to remain at an intellectual level or a matter of theoretical discussion. The comprehensive critique and the

concomitant demand for *paryayee vikas-neetee* (alternative development paradigm) formed a political agenda around which grassroots struggle in the Narmada valley was organised. The Narmada struggle was and continues to be conducted as a nationwide campaign around this agenda. The campaign started early on in the struggle (in 1989) with a rally attended by a large number of grassroots groups struggling against the onslaught of 'development' as well as organisations and individuals sympathising with the cause. Recently, the Narmada initiative, along with other major grassroots movements created the National Alliance of Peoples' Movements (NAPM) and organised its national convention on March 16-18, 1996. The NAPM movement is in

the process of producing, through direct interaction between researchers and activists, a comprehensive and analytically sophisticated document which would provide Alliance's critique of the conventional development standpoint, as well as a vision and strategies of *paryayee vikas-neetee*.

#### THE CHRONOLOGY OF THE CONTROVERSY AND THE MAIN ACTORS

To help trace the evolution of the Narmada struggle, a brief chronology of the important events is presented in Table 4. The chronology is brief because only some of the important happenings during the decade-long, eventful struggle are listed.

Table 4: The Struggle Against Narmada Dam: A Chronology of Events

Date/Year (1)	Important Events (2)
1946 to 1960	Plans and project designs prepared to impound or divert Narmada river.
1960	The Planning Commission of India grants permission to begin work on a 162 ft (63.78 m) high dam near Navagam with a permission to raise it to 320 ft (126 m) in the second phase.
1960-1961	Land acquired from five villages around Kevadia in Gujarat to build a colony for construction staff of the proposed dam.
1964	Appointment of Khosla Commission to resolve the dispute over water apportionment.
September 1965	Khosla Commission submits report. Allows GOG to raise the dam height to 500 ft (197 m) GOM and GOMP reject recommendations of the Commission.
October 1969	Narmada Water Dispute Tribunal (NWDT) constituted to resolve the inter-state dispute over Narmada water distribution.
December 1979	NWDT finalises its award. Allows the dam height to be 455 ft (180 m) and stipulates the basic R & R policy giving 2 hectares of land to every landholding family.
1979-1980	Resistance movement against this award in <i>nimad</i> region of MP.
1980-1987	Affected tribal families from Gujarat and a voluntary organisation work together to fight the GOG for a comprehensive and fair R & R package.
1983	Affected tribal families organise a protest rally in Ahmedabad.
February 1986	Affected families in Maharashtra and activists come together to form a grassroots organisation (named Narmada Dharangrast Samiti). Similar grassroots organisations created in Gujarat (Narmada Asaragrast Sangharsha Samiti) and MP (Narmada Ghati Navnirman Samiti).
April 1986	MOEF stays dam construction work.
September 1987	MOEF grants permission although the mandatory environmental studies are not completed. Puts in <i>pari passu</i> clause.
November 1987	Affected families from three states submit their 'Charter of Demands' to Narmada Control Authority (NCA).

(Contd.)

Table 4: (Contd.)

Date/Year (1)	Important Events (2)
December 1987	GOG announces new R & R policies providing 2.5 hectares of land to the families of 'encroachers,' 'landless' and 'major sons'.
January 30, 1988	Rally at Kevadia by affected families from three states.
May 14, 1988	An extended discussion between the officials from NCA and 250 representatives of the affected families from three states. According to the organisations, officials fail to satisfy them.
August 18, 1988	Three grassroots-level organisations from three states (mentioned above) announce their total opposition to the dam and boycott on all dam-related survey work.
September 2, 1988	The grassroots initiative and supporters organise a sit-in at Delhi. Participation of 500 eminent individuals and other organisations.
November 1988	Official formation of a network of support groups in Maharashtra under the name 'Narmada Bachao Samiti' (Save Narmada Committee).
January-March, 1989	Agitation against the Official Secrets Act invoked by GOG. After protest marches, arrests and court battle, GOG ceases the application of the Act in this matter on March 29, 1989.
February 1989	<i>Pada-yatra</i> (Foot-March) by activists in the affected areas lasting for two months.
February 22, 1989	Protest rally of tribal people at the dam-site. About 10,000 people arrested. Activists beaten by police.
March 1, 1989	Indefinite hunger-strike by representatives of local communities at Badvani in MP.
June 9, 1989	Protesting tribal people close down government offices connected with the dam at Dhadagav (Maharashtra). 150 arrested.
September 28, 1989	National level rally at Harsud to express resolve to oppose destructive development schemes. Attended by 50,000 representatives of about 500 organisations from all over the country. Resolve to work in collaboration for a new development paradigm.
January 17, 1990	Police attack a rally of 500 tribal people protesting against intimidation by staff of construction contractors. 200 arrested.
March 9, 1990	With the <i>Chakka-Jam</i> (road block) agitation at Khalghat, MP, an intensive struggle begins. Mumbai-Agra national highway blocked by 10,000 tribal and other supporters for 28 hours demanding comprehensive review of the project.
March 28 to April 5, 1990	Protest sit-in at Mumbai demanding review of the project. Two activists and two local persons go on indefinite hunger strike. On April 5, the Chief Minister of Maharashtra concedes to visit the area and stop submergence until villagers are rehabilitated properly.
April 8, 1990	Horse-mounted police attack protest rallies of tribals in Badvani and Alirajapur in MP. Citizens of the town come out to protest against the repression, 200 arrested.
May 1-8, 1990	Protest week against the dam in the entire <i>nimad</i> region.
May 14 & 19, 1990	Police beat protesting tribal men, women and children with canes and gun handles.
March 1991	World Bank Commission's Independent Review led by Bradford Morse, a senior UNDP official.
June to December 1991	Grassroots struggle continues in the affected areas of MP and Maharashtra.
September 1991 to February 1992	Independent Review, also known as Morse Commission conducts its visits and hearings.
March 26, 1992	Alleged 'invasion' (forced entry) of village Manibeli by GOM and GOG officials, and NGOs from Gujarat break down the ban imposed by the local grassroots organisations.

(Contd.)

Table 4: (Contd.)

Date/Year (1)	Important Events (2)
June 1992	Independent Review submits its report.
December 1992	GOM issues notices to 187 families in Manibeli and other villages to leave their land and be relocated in the face of submergence of their houses and lands in 1993 monsoon.
January 1, 1993	GOM officials try to build a road and clear-fell forest around the village Manibeli. Villagers resist. 200 villagers arrested.
January and February 1993	For four days police brutally attack protesting tribals in Anjanwada (MP). This was repeated in other tribal villages in MP throughout the two-month period.
January 30 to March 5, 1993	<i>Lok-nivada</i> (people's referendum and resolve) campaign in the affected area. The campaign involves contacting each family (especially women) to know their views and decision on whether to accept the R & R or continue resistance to dam. Finally 22,523 families say 'no' to dam.
April, 1993	World Bank finally decides to withdraw. GOI announces withdrawal of its request for loan.
May 29 to June 10, 1993	GOM officials encircle and block the village with the help of about 700 police. Some houses and the office of the initiative are torn down and protesting villagers are arrested.
June 3-17, 1993	Indefinite fast by Medha Patkar and a local representative; this is ended when GOI comes out with a concrete proposal for a review of the project.
June 29-30, 1993	First meeting called by GOI to crystallise review process.
July 11 & 16, 1993	Villages of Vadgam and Manibeli submerged.
July 22-28, 1993	Sit-in agitation at Delhi; <i>Jal-Samarpan</i> agitation announced.
August 3, 1993	GOI announces 'discussion group'. Offer rejected by the grassroots initiative.
August 5, 1993	GOI finally announces five member review panel.
August 12 to October 24, 1993	Review panel conducts hearings.
August 18, 1993	GOM officials attempt to carry out survey using police force.
October, 1993	World Bank extends deadline for completion of the mandatory studies.
November 19, 1993	One local activist dies in police firing while protesting against police attempt to conduct survey.
November 22, 1993	Police repression against people protesting against the firing death, 250 injured, 126 hospitalised.
December 31, 1993	NCA refuses permission to close down the sluice gates and carry out further work.
January 4, 1994	MOEF and Department of Water Conservation of GOI imposes ban on further construction.
February 23, 1994	GOG closes sluice gates, violating NCA orders.

(Contd.)



Table 4: (Concl'd.)

Date/Year (1)	Important Events (2)
February 24, 1994	Gujarat High Court bans further increase in the height of the dam wall. But GOG continues with the project work.
May 1994	NBA files a comprehensive writ petition in Supreme Court.
July 1994	Report of review panel submitted but kept secret under orders of the Gujarat High Court.
November 21 to December 16, 1994	One activist and four local men and women on indefinite hunger-strike.
December 13, 1994	Supreme Court passes important orders to sideline restrictions placed by the award of the Tribunal.
January 1995	Dam construction stopped at the height of 80.3 m (204 ft). Supreme Court refuses to allow further construction.
November 28-30, 1995	First round of final hearings in Supreme Court begins.
December 5-7, 1995	Second round of final hearings. Further hearings postponed to March 1996.
March 12, 1996	Final hearing in the Supreme Court resumes. Hearings postponed to July 1996.

Sources: Fisher, 1995a; Dabholkar, 1990; Gili, 1995; NBA, 1994, 1995; Patkar, 1988, 1995.

Before engaging in the analysis of the events in the Narmada struggle, a brief description of the main actors in the struggle is presented here. Important actors who participated throughout the struggle are identified and grouped in Table 5 according to the categories described in the analytical framework.

As Table 5 indicates these categories are: (a) threatened communities and their grassroots organisations; (b) activists and groups working with them; (c) radical anti-project elements from the fringes of the macro-system; (d) reformist macro-system elements selectively criticising the project; (e) pro-project elements mainly from the mainstream of the macro-system; and (f) regulatory or arbitrating institutions within the macro-system.

In addition to the threatened communities, actors in the first category include three grassroots organisations (formed by the community leaders and some activists working with them) in three states: Narmada Dharangrast Samiti (Committee of the Narmada Dam Affected) in Maharashtra; Narmada Asaragrast Sangharsha Samiti (Action

Committee of the Narmada Dam Affected) in Gujarat, and Narmada Ghati Navnirman Samiti (Committee for a New Life in Narmada Valley) in MP. In the second category the major actor is the nucleus group of outside activists (led by Medha Patkar) which has been the backbone of the grassroots initiative that emerged from the initial struggle. This category also includes activists belonging to an NGO from Gujarat called ARCH-Vahini<sup>32</sup> which has played an important part in the initial period of the struggle.

The third category contains a large number of radical organisations, groups and individuals from all over India and abroad who have been supporting the struggle under various banners including Narmada Bachao Samiti and International Narmada Campaign. In the fourth category are a small number of individuals and NGOs who have been critical of the project on environmental or R & R issues, but have disagreement with the grassroots initiative leading the struggle over the demand for cancellation of the dam. Actors in the fifth category of pro-project mainstream, in this case, are led by Government of Gujarat and supported by various agencies of other two state

governments and the central government as well as by multilateral agencies such as the World Bank. The arbitrating institutions from the macro-system in the last category, especially the Independent Review appointed by the World Bank and the Supreme Court of India, have influenced the struggle in significant ways.

**Table 5: The Main Actors in the Struggle Grouped in Six**

Categories of Actors (1)	The Main Actors (2)
Threatened Communities & Their Organisations	Villegers in the Threatened Villages and Their Representatives.  Three Local, Grassroots-Level Organisations in the Three States.
Activists Working with Threatened Communities	A Nucleus Group of Outside Activists led by Medha Patkar. Some Activists With Reformist Agenda Focusing on R & R Issues (For Example, ARCH-Vahini).
Radical Anti-Project Elements Supporting the Initiative	Environmental and Social Activists' Groups from All Over the Country and Abroad (e.g., Lok Vidnyan Sanghatana, Prayas of Pune, India; Lokayan and Kalpavriksh of New Delhi; and Environmental Defense Fund from the USA and the International Rivers Network).  Activists from Other Similar Grassroots Initiatives (e.g., Azadi Bachao Andolan).  Large Number of Radical Professionals and Experts from Around the World (e.g., Ashwin Shah from the USA, Rajani Kothari).  Large Number of Individual Supporters, Young People and Common Citizens in the Country.
Reformist Macro-System Elements Selectively Criticising the Project	Several Reformist Experts as well as Professionals (e.g., Dattaprasad Dabholkar, B.G. Verghese).  Some Elements of Media.
Pro-Project Elements from the Mainstream Macro-System	GOG, GOI, GOM, GOMP and Their Project Related Agencies.  Governments of Industrialised Countries (USA & Japan) and Their Aid Agencies.  The World Bank & Other Multi-Lateral and Bi-Lateral Agencies.  Some elements in the Mainstream Macro-Institutions like Academia, Media, Political Parties, and Industries and Trade Organisations (e.g., Sardar Patel Institute of Economic and Social Research, Ahmedabad).
Regulatory/ Arbitrating Elements Within the Macro-System	Judicial System: Supreme Court, High Courts, & District Courts.  Narmada Control Authority.  The Independent Review Commission of the World Bank (Morse Commission).  Ministry Of Environment and Forests (MOEF) of GOI.

DYNAMICS OF THE NARMADA CONTROVERSY:  
ANALYSIS OF PHASES

Against this background, it is now possible to analyse the grassroots struggle against the Narmada dam using the framework described earlier. It begins with a description of the design and consolidation phase of the project engineered by the macro-system. The second sub-section provides an analysis of the emergence and consolidation of the grassroots initiative. The next two sub-sections are devoted to the detailed analysis of events in the confrontation phases. This is followed by a discussion of the present stalemate in the resolution phase. The last sub-section analyses various factors shaping the alternative that may ultimately emerge.

*The Project Design and Consolidation Phase*

While the idea of a dam on the Narmada River can be traced as far back as 1946, the current design is the product of the award delivered in 1979 by the Narmada Water Dispute Tribunal (NWDT). In 1983, Tata Economic Consultancy Services (TECS) prepared a cost-benefit analysis for the project [Patel V.M., 1991]. In 1985, officials from GOG and GOI, with the help of experts from the World Bank, finalised the project plan.

In order to optimise the design of the project and to secure the loan for the project, GOG had, from the beginning, involved experts from the World Bank [Blinkhorn and Smith, 1995, p. 92]. In 1985, after extended negotiations, the officials of the World Bank and GOG finalised their credit and loan agreement along with the project design. On May 15, 1985, the World Bank entered into three separate loan agreements with GOG, GOM, and GOMP for a total of \$ 450 million [Blinkhorn and Smith, 1995, Pp. 93-94]. Based on the World Bank's appraisal and approval, several international lending and aid agencies extended loans for the project.<sup>39</sup> The largest among them was Overseas Economic Cooperation Fund (OECF), the development aid agency of the Japanese government, which extended a loan of nearly

\$150 million. This loan was to be utilised for the purchase of turbines from Sumitomo and Hitachi Corporations [Patkar, 1995, p. 175].

Thus, the macro-system had succeeded in creating notional but substantial investments in the project after lengthy procedures and negotiations extending over two decades and with involvement of a large number of national and international agencies. The work of Khosla Committee as well as decade-long deliberations of the NWDT helped create the impression that all possible impacts, problems and the costs of the project had been weighed properly before sanctioning it.

In this regard, it is clear that vested interests of influential sections of the macro-system were mobilised from the outset of the project. The World Bank was requested to work on 'preparation and appraisal' of the project design by GOI and GOG. The appraisal report prepared by the Bank became the basis for securing a very large loan of \$450 million from the Bank. On the basis of the World Bank's findings, aid agencies of wealthy nations extended loans and grants. The direct and indirect vested interests of the international elements of the macro-system were so well-mobilised that it took a six-year long, world wide campaign by more than twenty international NGOs and many more individuals to make the World Bank rethink on its decision to grant the loan for the project [Udall, 1995].

Such a large project involving an estimated investment of Rs 40 to 135 billion provided an historic opportunity to receive large profits, fees and other benefits for construction firms, allied businesses, consulting firms, individual experts and professionals. As well, central and state governments involved in the project stood to gain politically. The region which was to benefit most in the immediate future from the proposed dam was South Gujarat, one of the few industrially and agriculturally rich areas in the entire country. The elite of South Gujarat has had a firm hold on the economy and politics of the state of Gujarat for a

long time. In fact, the South Gujarat elite has significant clout in Mumbai, the commercial capital of the country.

Momentum in favor of the project was further fortified in this first phase by the goodwill created over the promise that it would serve as the 'life-line of Gujarat' and as the permanent solution to 'quench the thirst' of the arid areas of North Gujarat, Saurashtra, and Kutch [Shah, 1995, p. 321]. The issue was portrayed by politicians and other pro-project elements in the state as a matter of life and death for the entire state. They were successful even in stunting the opposition from within Gujarat to the project. In fact, the two leading intellectuals from Gujarat, who signed a petition (with scores of other intellectuals from around the country) asking for an independent review of the project, were forced to retract their statements due to the frenzied reaction of political activists in the state [NBA, 1994, p. 78]. It took years of sustained campaigns inside Gujarat by grassroots groups and their supporters to put across to the people of Gujarat, especially people from Saurashtra and Kutch, the view that the project needs to be examined in an objective manner and a practical context. Even so, only a small section of population of Gujarat are convinced that the project should be reconsidered.

During this initial project design and consolidation phase, the impact of the project on local communities was never given serious thought. The Khosla committee as well as NWDI, which deliberated over the techno-economic issues and the water distribution feud between the states, never investigated what might be the concerns and possible costs to the tribal communities spread over the remote hilly and forested areas that would be threatened by the dam. Neither were project authorities, government officials, political parties and other institutions from the macro-system aware of these problems. Anil Patel of ARCH-Vahini (hereinafter referred to as Vahini), the first voluntary organisation to start working with tribal people threatened by the dam, has a vivid description of the situation:

The tribals knew nothing about the project and their imminent displacement. The land-owners were served land acquisition notices, but they knew little about their entitlements. They knew little about the place they were going to be resettled. The administrative set-up for the resettlement and rehabilitation was in a pitiable condition. The administration was informed by a smug belief that, as in all major irrigation schemes in Gujarat and elsewhere in India, the project-affected people would just have to move, accepting whatever was offered to them. The indifference and casualness, no doubt, derived its inspiration and strength from the top echelons of the administration and political leadership. *A minister in charge was quoted, saying that the government didn't have to move a finger to resettle the tribals; the tribals would leave their habitat like rats from their holes when water would rise* (emphasis added). The elected representatives of people were nowhere in sight. People dared not approach them with their woes. Everywhere in the submergence zone in Gujarat and the other two states, nobody thought it necessary to inform properly the people about the displacement, the reasons for it, and their entitlements. Almost always they came to know about the project and the future inundation of their lands and houses through surveyors who were pitching the boundary stones of the reservoir. Fear of displacement and an uncertain future was visible on their (local tribal people's) faces. The panic was palpable [Patel, Anil, 1995, p. 182].

Thus, in short, as described in the earlier section on framework, the initial phase set in motion a process of securing support from vested interests in the project to make it a rational and inescapable step toward development of the region. As suggested in the framework, the macro-system arrived at the locale of the dam with a detailed plan, while the local people were in the dark even about the basic information of the project.

## *Emergence of the Grassroots Initiative*

### *(a) Evolution of the Initiative*

In the case of the SSP, the threatened communities are spread over three different states and are culturally and socially diverse. Hence, it was natural that the initial grassroots activity evolved in these regions independently. After the NWDT's award in 1979, there was an immediate reaction from the *nimad* or plains areas in MP in the form of protests and agitation. In fact, people from the *nimad* areas, with more resources and better exposure to the macro-system as well as with their intensive agriculture and comparative affluence under threat, would have logically been expected to lead the protest against the dam.

However, the initial resistance in the *nimad* was suffocated in the quagmire of partisan politics. It was the Vahini's work with the threatened tribal communities in Gujarat that sparked the initial grassroots-level resistance. Vahini's efforts started in 1980 in a group of villages in Gujarat that were to be submerged first.<sup>34</sup> The tribal communities felt helpless against the government and did not respond to the initial efforts of Vahini to organise a protest against inadequate resettlement and rehabilitation measures. In the first three years, Vahini could do little more than monitor the implementation of the resettlement and rehabilitation policy of GOG which was 'deeply repressive' and 'fell far short of even the Tribunal award' [Patel, Anil, 1995, p. 183]. After an initial, confidence and rapport-building phase, the tribals, infuriated over the evasive behaviour of a local government official (the official retracted the written promise), decided to follow Vahini's advice and seek redress in the High Court of Gujarat. The government had to compromise with them in this particular instance, which helped to instil confidence in the tribals that they could challenge the state.

Vahini, in collaboration with Oxfam (a British development NGO), then lobbied the World Bank to get a fair compensation package also for people in the categories of 'major sons' and 'encroachers'. The Vahini's agenda remained entirely

focused on the demand for a comprehensive and fair R & R policy package. Through a series of legal battles as well as demonstrations and rallies, the struggle for a compensation policy continued until December 1987 when the GOG formally announced a new policy that was found acceptable by Vahini.

By this time, grassroots level activity had started taking shape in the threatened villages in Maharashtra as well as in MP. In 1985, Medha Patkar - the first outside activist to initiate dialogue with the dam-affected families in Maharashtra - made her initial contacts in the Narmada Valley. In February 1986, a grassroots-level organisation of activists and representatives of the threatened communities - Narmada Dharangrast Samiti - was officially founded in the threatened villages in Maharashtra. This was followed by the formation of similar grassroots organisations in MP and Gujarat under the banners of Narmada Ghati Navnirman and Narmada Asaragast Sangharsha Samiti, respectively. A large public rally was organised in the beginning of 1986 at Dhadagav to air the grievances of the threatened communities [NBA, 1994, p. 77].

These grassroots organisations started their activity by raising the issue of fair and comprehensive R & R policies. In addition, they also put forth many questions about the design of the project and its implications. They knocked at the doors of every conceivable government agency for more than three years while searching for answers to these questions and issues [Patkar, 1995, Pp. 160-161]. Even after satisfying all the procedural demands of these agencies, the organisations and activists failed to get satisfactory answers. The government agencies responded largely by stonewalling [Patkar, 1995, p. 161]. Hence, grassroots organisations decided to seek the necessary information using their own sources. After a thorough study of the available documents and reports from the World Bank, GOG, GOM and GOI, grassroots groups arrived at the following conclusions: (a) the government agencies had no intention of taking local communities into confidence; (b) the government agencies had no proper plans prepared for fair and

adequate R & R; in fact, they did not even have the preliminary information necessary for chalking out such plans [Patkar, 1995, p.167]; (c) the comprehensive R & R policy is impossible to implement even with the best intentions on the part of the government because the land required for rehabilitating the threatened communities is simply not available (even the forest land which was identified by the GOM was already encroached, and the private lands which GOG was offering were either unfit for agriculture or already encroached by others); (d) the mandatory studies necessary for estimating the environmental damage had not been even initiated and the MOEF had not granted its clearance to the project; and (e) the project itself is flawed on various technical and economic grounds, including the official figure of the cost-benefit ratio which is unrealistic [Patkar, 1995, p. 166].

Gradually, instead of taking for granted that displacement is unavoidable, the grassroots communities and groups started raising more fundamental questions rooted in their livelihood-related concerns: Is displacement unavoidable for the development project? Is it possible at all to rehabilitate the displaced people in the true sense? Have the development policies, which require displacement as an integral part of the development project, properly taken into account the massive destruction of livelihood sources (private and common) relied upon by the members of the threatened communities? Can destruction of all these livelihood sources be truly and entirely compensated by any conceivable and practicable R & R policy in the prevailing situation? Toward which causes and in whose interest, is this sacrifice imposed on tribal communities? And are these causes and interests just and justifiable? [NBA, 1995, p. 1].

The above-mentioned conclusions they had reached and, more importantly, the fundamental questions they had raised prompted a major transformation in the agenda of grassroots groups. As a result, in May 1988, the grassroots organisations working in Maharashtra and MP decided to shift focus of their agenda from demanding a comprehensive R & R policy to adopting a stance

of complete opposition to the dam. At this juncture, however, Vahini had just succeeded in forcing GOG to formally announce a comprehensive R & R policy with which it was satisfied, and decided not to support the agenda of total opposition to the dam adopted by the grassroots organisations in Maharashtra and MP.

According to Vahini's position, the activists working with local organisations in MP and Maharashtra blundered by deciding to change their direction [Patel, Anil, 1995, Pp. 190-191]. Instead of focusing on securing comprehensive R & R policies similar to those offered by GOG from the other two state governments, these groups wrongly, in the view of Vahini, concluded that it was impossible to implement such policies and declared their complete opposition to the dam itself. Vahini found this 'sudden and total' opposition to the dam confounding. Anil Patel of Vahini argues that the opposition to the dam was not in the interest of the tribals, and the tribals of Maharashtra and MP would not choose to oppose the dam, especially when 'it was too late to stop the construction' [Patel, Anil, 1995, p. 191]. Finally, he poses the question: 'Was it responsible activism to keep the tribals in front of the fight against the project?' From this time forward, Vahini and the groups in Maharashtra and MP went separate ways, following two different and, often, conflicting agendas.

Over the following two to three years, activists involved in the struggles of local communities worked hard to keep up the tempo of the resistance movement by continuously organising mass-action programmes and developing a strong grassroots-based organisational structure in the affected villages in Maharashtra and MP. Simultaneously, activists organised a network of support groups comprising sympathetic individuals and organisations in major cities in northern and western parts of India (especially in Delhi, Mumbai, and Pune). In November 1988, Narmada Bachao Samiti (Save Narmada Committees) were formed in major cities and towns of Maharashtra including Mumbai, Pune, Nashik, Dhule and Nagar.



In this way, the grassroots initiative gradually evolved 'with the (three) local [grassroots] organisations at the core' and a support structure in the form of a network of a 'wide cross-section of supporters from all over the country' [Patkar, 1995, p. 163]. The initiative was later named 'Narmada Bachao Andolan' (NBA) - the Save Narmada Movement. While the NBA formally came into being in 1990, functional collaboration between the nucleus group of activists, grassroots organisations and the network of supporting organisations and individuals had already been consolidated by 1988.<sup>35</sup>

*(b) Consolidation of the Grassroots Initiative*

The structure of the grassroots initiative is somewhat different in the case of the Narmada struggle. The initiative is developed and nurtured initially by a small nucleus group of outside activists. Convinced about the commitment of these activists, the young members, women and elderly leaders of the threatened communities rallied around the group through the three grassroots organisations. Further, impressed by the hard work and commitment of the activists and convinced about the genuineness and critical nature of their cause, a large number of supporters from outside the area also rallied around the nucleus group and the local communities forming the third layer of the initiative supporting the core.

Although it has not restricted its operation only to grassroots participation, the Narmada Bachao Andolan (NBA) satisfies the three criteria of a grassroots initiative mentioned in the discussion on the analytical framework discussed in the earlier section. First, the primary commitment of the initiative has always been the livelihood concerns of the threatened communities. Second, the initiative has always insisted on participation of members of local communities, especially women and youth, in every activity and programme in the decade-long struggle, be it the *jal-samarpan dal* (self-drowning team) or receiving the prestigious international awards. Third, despite a vast support network of outside supporters, the local communities have always remained the main source of strength for the

initiative. Outside activists in the nucleus group, on their part, have been successful in taking utmost care that no direct or indirect influence from the macro-system would be allowed to weaken their commitment to concerns of the local communities and their reliance on the grassroots communities.

Simultaneously, local people and their leaders have been vocal, active and ready to rise to any challenge during the decade-long struggle. They have played a prime role in shaping both the agenda and the action of the grassroots struggle. Their questioning of the project, in particular, and of the development process in general has been the main factor that prompted transformation of the initial reformist agenda of the emerging initiative into the grassroots agenda focused on livelihood related concerns. As Patkar, the NBA leader, recounts:

When I started looking deeper into the situation and gathering information from the people themselves, it was clear that they had many questions in their minds... They would raise questions that were very relevant and very articulate. 'No one asked us as to whether we want to move out of here'. 'How can they decide to build the dam without taking our permission?' 'Have they really decided what would happen to us?' 'No one has told us where we would go and where we would be resettled'.

These were not the only questions. They would also say, 'We have *kukra* (hens), *bukra* (goats), cattle, and whatnot (sic)? There are also *kira* (insects), *mungi* (birds), and so on, in the valley'. Then, 'have they even assessed how much (would be) the destruction and what would be the final loss? How can they just go and submerge such a large area?' So these were the questions.

Some would reflect on the process of (development) planning itself. For example, Batu Patil of village Dharad would say, very pertinently, that the planners know how to plan for every single brick (as if the dam was

to be built of bricks) but they would never plan for the lands and houses so that they could also be properly relocated. Many people would also give their reactions to the whole idea of development. An old woman in Chimalkheda, for example, said, 'I will not move. I will die here. They may give land and water and whatever. But can they give me my Chimalkheda? That is not possible. So, why should I go?' These types of questions and feelings were very clearly put when it (the project) was discussed in three and four hour (long) meetings in hamlet after hamlet [Patkar, 1995, p. 158].

Without whole-hearted participation, commitment and sacrifice of local people, political action in the struggle could not have sustained in the face of large-scale mobilisation of resources and state machinery by all the state governments and mobilisation of public opinion in Gujarat by mainstream political parties. In almost every single action programme - be it a hamlet-level picketing or the joint action at dam site - local people participated in a large number. For example, rally at Harsud in September 1989 was attended by over 50,000 people, mostly local tribals; the *chakka-jam* agitation in March 1990 saw participation of more than 10,000 local people; and 'tens of thousands' of tribals participated in the Long March in January 1991 [Fisher, 1995a, p. 3; NBA, 1994, Pp. 80-81]. Representatives of local people have also been part of every indefinite hunger strike which has been one of the most effective strategies used by the initiative.<sup>36</sup> Local people have also borne the brunt of state repression in numerous incidents throughout the valley. This valiant and sustained struggle of local people is yet to be documented properly.

The outside activists in the nucleus group have continuously and consciously tried to maintain the programmes as well as the image of the initiative as a joint activity of the activists and representatives of local people [Patkar, 1995, p. 158]. In their personal lives as well as in their organisational activities, these activists have been austere, surrendering all awards and avoiding

attention. Nonetheless, outside activists, especially Medha Patkar, the NBA leader, have often been accused of misinterpreting facts, dominating the initiative and the struggle in the name of tribals, seeking the international limelight, building up their personal image, etc. [Alagh, 1991; Dabholkar, 1990; Gill, 1995]. They have also been the focus of charges that the NBA is not a grassroots-based action group as it claims. However, it must be noted that, especially during the initial years of struggle, these outside activists, in their efforts to build and maintain strong organisational structure, have completely immersed themselves in the daily lives of the threatened communities. This exposure and their collaboration with the threatened communities in the struggle helped them to understand and appreciate the grassroots standpoint rooted in the livelihood-related concerns of the communities. This eventually reflected in the transformation of the agenda pursued by the initiative. Clearly, just because they originally came from outside, these activists cannot be barred from representing the grassroots standpoint. Through their 'philosophical and political struggle', they seem to have earned the respect and confidence of the threatened communities as their representatives. It cannot be denied that outside activists in the nucleus group have been instrumental in shaping the Narmada struggle. And, hence, the study of this grassroots struggle requires proper acknowledgment and analysis of the contribution made by the group, like any other actor involved in the struggle.

Seven young activists, three of them women, all between 25 and 35 years of age, formed the nucleus group. Two of the group members were professional social workers, while one came with the engineering background and the other, from the media. In the initial stages of the struggle, the group was active in the field and every member was directly working on struggle-related or organisational activities. With the evolution of the initiative, and once the grassroots organisational structure was in place, each of these activists assumed certain responsibilities. Two of them sought involvement in the field, one working in the villages of Maharashtra and the other in

villages in MP. A third activist shouldered much of the responsibility of the office and related tasks. Two activists started looking after technical aspects including coordination of legal battles and liaison with support groups and individuals in the country as well as abroad. One member of the group worked mainly on documentation, publication, and rapport and liaison with the media. Finally, Patkar served as the leader of NBA working mainly on three tasks: supporting the other two activists in the field to maintain the organisation, morale and tempo of the resistance movement in the Narmada valley; developing a network of supporting individuals and organisations from all over the country; and developing an alliance of similar movements and initiatives struggling against development projects.

The activist group bore a major share of burden in the decade-long struggle. It was successful in building up a strong, effective and militant organisation of the threatened communities on a participatory model. This was accomplished against immense odds. Apart from the problems posed by the difficult and inaccessible terrain, as well as remote and dispersed hamlets, NBA had to grapple with the centuries-old social seclusion, political marginalisation and economic deprivation suffered by tribal people. Organising tribal communities, which have borne the brunt of oppression and exploitation for centuries, in a militant but peaceful as well as strong movement, and sustaining such a movement for a decade is an exceptional achievement. The activists successfully motivated people from local communities to fight against the repressive and violent tactics of the state apparatus for a decade. In addition to this work at the grassroots level, the activist group successfully handled challenges posed by various macro-system institutions on different fronts: technical, economic, legal, policy-making, etc. The group, with help from sympathisers and supporters, managed to successfully challenge the World Bank experts in a duel over highly sophisticated technical and policy issues. They even matched the political strategies with one of the most astute politicians in contemporary India.<sup>37</sup> Their multi-faceted

success has attracted worldwide attention and has also brought criticisms from the mainstream and reformist elements in the macro-system.

#### *Confrontation Phases: Struggle for Credibility and Agenda Setting*

Discussion of the confrontation phases of the Narmada struggle involves two topics. First, there is the struggle waged by the initiative to establish its credibility and authenticity as well as the genuineness of its cause. Second, there is also the struggle by NBA to set the agenda of the debate. As both these struggles were waged simultaneously, they are examined together in this section.

##### *(a) Establishing Credibility and Authenticity*

Initially, when the efforts of the initiative were focused on demands for a comprehensive R & R policy, the response of the macro-system was evasion and stonewalling. In the next stage, only after considerable political action on the part of the initiative, was the macro-system ready to grant concessions on the issue of R & R. The government agencies wanted the initiative to cooperate with it on implementing the R & R policy which the initiative found highly inadequate [Patkar, 1995, p. 160]. However, when the initiative started raising questions and objections against the project itself, the macro-system agencies reacted aggressively, questioning the authenticity of the initiative and its ability to represent the grassroots people [Gill, 1995, p. 244]. When the initiative demanded responses on these questions and objections, the GOG reacted by utilising provisions of the Official Secrets Act to withhold information [NBA, 1994, p. 79].

The struggle for credibility by the initiative began in earnest especially after the announcement of their opposition to the dam in the middle of 1988. The activists and grassroots leaders were criticised by the government and other pro-project elements. In addition, many NGOs and others supporting the dam directly raised doubts about the real intentions and integrity of the activists and their supporters. Some even accused

the opposition of being puppets of international interests conspiring against India and attempting to thwart India's development [Dabholkar, 1990]. Two of the most damning attacks came from the NGO mentioned before (ARCH-Vahini) and from a scientist, Dattaprasad Dabholkar, who wrote a persuasive book in Marathi bitterly criticising the initiative, its leader, and the agenda of *paryayee vikas-neetee* [Dabholkar, 1990].<sup>38</sup>

The government and 'developmentalists' like Dabholkar specifically sought to raise doubts about the genuineness of the complaints of the initiative about the project. They tried to marshal necessary technical support from many experts and engineers to refute the techno-economic objections against the project. Regarding the displacement-related objections, Dabholkar and others accepted that there were serious deficiencies in the project design and implementation and stated that that these could be corrected as the project work progressed. But, they scoffed at environmental concerns as fetishes imitated from the West which a developing country like India simply cannot afford. More specifically, 'developmentalists' waged a vituperative attack on the idea of *paryayee vikas-neetee* (alternative development paradigm) put forth by the initiative charging that it was nothing but romanticism of some idealist individuals [Dabholkar, 1990].<sup>39</sup>

The authenticity of the claim of the initiative as the representative of local communities was hotly contested by the governments involved and their supporters [Gill, 1995, Pp. 245-246]. Anil Patel, one of the leading activists of Vahini, suggested that the tribals from MP and Maharashtra would want to get a good R & R policy package like tribals from Gujarat. However, Vahini claimed that tribals were not allowed to exercise an 'informed' choice because NBA members had distorted the issue [Patel, Anil, 1995, p. 190]. Similar allegations were made by the GOM officials who accused the initiative of feeding wrong information to the local tribals, misleading them, inciting them and causing severe hardship to tribals by asking them to boycott government facilities and the movement of project officials in the affected villages [Gill, 1995, p. 247].

To counter charges of the macro-system, NBA adopted two strategies. First, it continued its campaign to expose shortcomings in project design and call attention to the serious environmental and social impacts of the project. This effort was assisted by the sympathetic elements in the media and the network of supporting groups and individuals. The second strategy was to establish its authenticity as the representative of the local communities by organising a series of mass-action programmes in the Narmada valley as well as in capital cities like Mumbai, Bhopal (state capital of MP) and Delhi. The large scale participation of members of the local communities in these programmes provided effective rebuttal to the efforts of the macro-system and its supporters to doubt the authenticity of the initiative as a representative of the affected tribals.

#### (b) Agenda Setting: Two-Pronged Strategy of the Initiative

The struggle for agenda-setting had taken the initiative itself through an evolutionary process from reformist demands to an agenda comprising total opposition to the project and putting forth the alternative of *paryayee vikas-neetee* (alternative development paradigm). As a first step to take charge of the agenda, the initiative put forth a demand for a comprehensive review of the project and outlined a detailed methodology for such an exercise [Patkar, 1995, p. 170]. At the same time, NBA started work on a campaign to create awareness and develop support for the alternative it had put forth - *paryayee vikas-neetee*. On September 28, 1989, the initiative organised a rally of sympathetic organisations and supporters on the issue of *paryayee vikas-neetee*. It was attended by about 50,000 tribal and non-tribal activists and their supporters, representing more than 150 organisations from around the country. The rally was helpful in creating rapport and cooperation among organisations and movements working for *paryayee vikas-neetee*.

NBA was successful in pushing its ambitious agenda for three main reasons. First, the governments involved found it difficult to provide effective rejoinders to the sophisticated criticisms levelled by the initiative and its supporters. This allowed the initiative time to develop its agenda in more detail without the need to continually respond to counter-arguments. Second, the effective liaison the initiative maintained with the national as well as international media assured wide and sustained media coverage of its agenda items. And, finally, the continuous mass political actions and the crude repressive tactics used by the government created a moral and political force as well as ground swell of goodwill behind the agenda put forth by the initiative.

Despite the success of the initiative to focus debate on its agenda, the governments sought repeatedly to narrow the agenda down to some limited R & R-related objections. But the strategy of the state governments failed as the courts, media, and national as well as international groups became increasingly persuaded that the project had serious problems and involved enormous costs. The first official acceptance of the agenda of the initiative by the macro-system came when the World Bank commissioned an Independent Review of the project in March 1991. In its final report issued in June 1992, the Independent Review team accepted most of the positions taken by the NBA forcing the World Bank to withdraw from the project [Morse and Berger, 1992].

It is important to note that, in forcing the macro-system to respond to its own agenda, the initiative did not become trapped by its success. In this regard, a potentially serious 'trap' is for members of the initiative, buoyed by their initial triumphs, to seek further expansion of the agenda. First, this expansion brings forth the issues demanding fundamental changes and are ill-suited for debate before the macro-system institutions such as courts. To avoid this, the initiative followed a limited strategy of arguing before official forums that the project is economically, socially and environmentally costly and ill-conceived and, here, demanding that the project

be abandoned. As a result, the initiative has also been successful in convincing the arbitrating authorities like the Independent Review and the courts.

Another challenge posed often by expansion of the agenda is disagreement within supporting coalitions and even within the ranks of the initiative over issues requiring fundamental changes. The possibility of disagreement among the members of the NBA did not arise because members had undergone a gradual transformation (from being committed to an essentially reformist agenda to one raising fundamental issues) through first-hand exposure to the grassroots situation and their own analysis of project plans and designs. Thus, members had arrived at grassroots agenda, not through an ideological and intellectual route, but through their own experience and analysis. Further, NBA developed a network of supporters primarily committed to the cause of the local communities and the agenda of the initiative. This is different from the supportive coalitions that emerge in many other grassroots struggles. These coalitions, typically, are made up of different organisations and groups having diverse ideological and political backgrounds and having different motivation in supporting the initiative. In such cases, there is the possibility of disagreement over expanding the agenda. The initiative made a concerted effort to keep its supporters (from the threatened communities as well as from outside) focused on the fundamental cause of livelihood security. This helped to protect against members becoming alienated from the struggle because of the increasing complexity of the debate. Members of the local communities, as well as outside supporters were kept well-informed about the debate and the strategies being pursued by the initiative. Direct and sustained contact with community members and outside supporters was maintained through meetings in villages in the valley as well as outside in towns and cities. The initiative, especially to maintain contact and ensure support from media and outside activists, also produced a series of publications explaining in very simple language the issues, the debate and the strategies and programmes adopted.

### *Confrontation Phases: Eruption of the Struggle*

By the year 1990, the grassroots initiative had established its credibility and authenticity and has been successful in enforcing grassroots agenda for the debate. In the words of NBA's leader, Medha Patkar, 'when we heard that submergence was likely in 1990 itself, we decided that we must now start going into mass action with a determination to get the answers to the questions, that we should not just raise questions and create wider awareness because now the mass base was created' [Patkar, 1995, p. 164]. With the dam height reaching the level at which submergence was possible, or unavoidable as some saw it, the struggle reached the eruption stage. For the next four years, intense mass action and equally heated debate ensued.

The phase started with a *chakka-jam* (blocking the road) agitation on March 6, 1990, at Khalghat in MP, where the major national highway crosses the river Narmada. About 10,000 tribal people blocked the highway for about 28 hours, forcing the Chief Minister of MP to agree to take up NBA's demand for a review of the project with the Prime Minister on behalf of the local communities and people's organisations in the state. This was followed by a *dharana* (sit-in) agitation in Mumbai by about 400 tribals from villages in Maharashtra with the demand that their villages should not be submerged before their grievances were heard and acted upon. In order to force this demand, two activists and two representatives of local communities decided to go on an indefinite hunger-strike. On the eighth day of their fast, the Chief Minister of Maharashtra promised to visit the dam site and see to it that the villages from Maharashtra would not be submerged until problems in R & R policies are sorted out. On April 8, and again on May 14, 1990, police, mounted on horses, attacked the protesting tribal men and women with canes in two towns in MP. On May 18, 1990, there was a *dharana* (sit-in) protest in Delhi. These state-level programmes were followed up with the *Jan Vikas Sangharsha Yatra* (Struggle for People-Oriented Development March) or the 'Long March' beginning on December 25, 1990. The Long March lasted about

a month, travelling through the entire area threatened by the dam. According to reports, tens of thousands of people participated [Fisher, 1995a, p. 3]. The march was followed by a 22 day-long hunger strike by seven members (3 women and 4 men) of the initiative (including activists and local people). These protests were the beginning of the intense struggle that would follow in the next four years.

Local communities demonstrated extraordinary courage, especially during the Eruption Phase, in the face of intimidation, repression, and violent tactics used by the state apparatus. The chronology presented in Table 4 spotlights several incidents of violent repression that include two local people being killed in police firings [NBA, 1994, Pp. 45-46]. The official position was to downplay these incidents of repression as unfortunate occurrences being used for propaganda value by the initiative with the help of its outside supporters and friends in the media [Gill, 1995, p. 252]. However, a report submitted by the retired Justice of the Mumbai High Court, S. M. Daud, confirms police repression and atrocities. Justice Daud visited the area at the request of the Indian People's Tribunal on Environment and Human Rights. He concluded that:

A disturbing feature of the affair is the repression let loose on the affected people and their supporters. The measures taken and strategies adopted to confront the agitationists range from annoying surveillance to down-right hooliganism. The affected people are arrested any time. Their homes are invaded at unearthly hours. Their children and women-folk are pushed about and insulted, as if they are cattle. Taken in buses to distant places, they are left in jungles and lonely roads to make their way to their homes in the best way they can. Abused, followed, beaten up and confined by the establishment of J.P. Associates (the main construction contracting firm), they have no redressal against the terror. For minor favors they are compelled to go



right to the High Court. Judicial verdicts proclaiming respect for the law and decency have no effect at the ground level, for no sooner is one injustice remedied than another is inflicted on the hapless victims by the powers that be. . . ? If indiscriminate arrests, beatings, confinements and prohibitory orders do not cease, the victims may be tempted to take to arms and add to the troubles faced by an already beleaguered nation [Daud, 1994, p. 19].

The struggle erupted to a higher level of intensity when the World Bank-commissioned Independent Review concluded that the project was unworkable. The June 1992 report of the Independent Review criticised the governments involved and the World Bank for poor project design and implementation, and neglect of environmental and human concerns. It observed:

We think the Sardar Sarovar Projects as they stand are flawed, that resettlement and rehabilitation of all those displaced by the Projects is not possible under prevailing circumstances, and that the environmental impacts of the project have not been properly considered or adequately addressed. Moreover, we believe that the (World) Bank shares responsibility with the borrowers (i.e., various governments in India) for the situation that has developed [Morse and Berger, 1992, p. xii].

The report changed the situation drastically. It supported the initiative's criticisms on design and implementation of the project, especially its claim that a comprehensive and fair R & R was not possible in the given situation. After an effort to salvage some level of support for the project, the World Bank finally succumbed to the pressure created by the coalition of international organisations and grassroots communities and effectively decided to withdraw from the project in March 1993 [Blinkhorn and Smith, 1995, p. 109].<sup>40</sup> Criticisms from such a prominent institution in the hierarchy of the macro-system undermined the position of pro-project government agencies in India. With the World

Bank withdrawing its support, the Indian governments were confronted with numerous problems *vis-a-vis* other multilateral and bilateral funding agencies. The Japanese government also cancelled the loan it had extended. This loss of international support and funding was a major blow for the governments which were already short of funds to continue work on such a large project.

The report had reverberations inside the country also. Its most important impact was the loss of credibility of the government agencies supporting the project in the eyes of general public and arbitrating agencies within the macro-system. It also lent credence to the positions of the initiative and created an opportunity for it to attack the state and central governments' positions during formal arbitration in the macro-system. However, government supporters held their ground and vowed to complete the dam, despite all the problems [Fisher, 1995a, p. 6].

With 1993 monsoon season approaching, it became clear that the dam wall would cause submergence of some villages in Maharashtra. From December 1992, GOM started making an organised effort to move out villagers from the immediately threatened areas including Manibeli (which would be the first village to be submerged). To force people out of the villages, GOM tried and was partly successful in clearing the forest around the area (on which villagers depended for their daily needs). In addition, a road was constructed to enable police to reach the area easily and press the local people to leave. On May 29, 1993, according to NBA information, GOM police encircled the village of Manibeli, blocked all entry and exit points, and destroyed several houses and the main office of the initiative in order to intimidate people and force them out [NBA, 1994, p. 83]. In protest, one activist and the representative of the local community went on an indefinite hunger-strike demanding immediate and comprehensive review of the project. The Manibeli incident and the indefinite fast created immense support for the initiative in the country and compelled the government to act on the

demands of the activists. After fourteen days of fast, GOI put forth a 'concrete' proposal to initiate a review process on June 17, 1993.

However, on July 11, swelling backwaters of the partly constructed dam submerged the first village. The initiative took the position that it was immoral and illegal to submerge villages without completing the review of the dam. The initiative's leaders also decided that the only effective way to protest submergence was to stay in the villages with the local community and expose themselves to drowning in the swelling waters. The *jal-samarpan* (self-drowning) agitation was officially announced on July 17, 1993. On August 3, 1993, bowing to public pressure and embarrassed by the resolve of the activists to drown themselves, the GOI offered to form a 'discussion group'. However, the offer was rejected by the initiative. Finally, on August 5, 1993, succumbing to grassroots pressure, GOI announced the appointment of an 'expert review panel' to undertake the review of the project. After three years of intense struggle, during which on many occasions activists and local people had to put their lives at stake, the initiative could finally force the government to agree to suspend the dam construction and negotiate a resolution with the initiative.

#### *Stalemate in the Resolution Phase*

While the GOI agreed to appoint an expert panel to undertake a comprehensive review of the project, the terms of reference (TOR) greatly restricted the scope of the review. Nonetheless, the initiative decided to go ahead with the review process. The review panel conducted its hearings between August 1993 and October 1993. It invited participation by all government agencies involved, the grassroots initiative, and other organisations and individuals who were interested in presenting their views. GOG again refused to cooperate but the GOI, GOM, and GOMP made presentations. The documents and supporting data submitted by GOI, GOM, GOMP, the initiative, and many organisations and individuals were so voluminous that the expert panel was forced to request extension of

its term. The report was finally submitted in July 1994. In the meantime, following a petition from pro-dam elements, the High Court of Gujarat had served an injunction on the panel ordering it not to make its report public.

Simultaneously, in spite of the resolution process initiated by the GOI, GOG continued its effort to complete the construction of the dam as fast as possible. In December 1993, the Narmada Control Authority ordered GOG to stop the construction of the dam. In January and February 1994, the Water Conservation Department and MOEF of GOI passed similar orders. These orders notwithstanding, construction of the dam continued. Reacting to this, the initiative sought and won an injunction from the High Court of Gujarat restricting GOG from carrying out any work that would cause further submergence. However, in February 1994, violating all these orders and restrictions, GOG went ahead and closed down the sluice gates of the dam creating a permanent submergence in a large area.

In response, the initiative filed a comprehensive writ petition in the Supreme Court of India, covering all issues in the controversy and especially those pertaining to submergence and the resultant displacement. The Supreme Court decided to join all ongoing litigations in this matter together and deliberate them as one case. In July 1994, the review panel submitted its report to the GOI but, however due to the High Court orders, it was kept secret. As it became clear later, the report had accepted most of the arguments of the initiative and other dam opponents, but had avoided arriving at any firm conclusions mainly because of the restricted TORs. Finally, on December 13, 1994, the Supreme Court issued orders instructing the GOI to make the report of the review panel public and removed the legal restriction that the award of NWDT cannot be challenged for 45 years.<sup>41</sup> It also directed the expert review panel to evaluate various objections and issues on their merits, complete its report, and arrive at firm and clear conclusions without considering the NWDT award or the TORs as constraints. And, the Supreme Court banned further construction at the dam site and the height

of the dam was restricted to 80.3 meters until the matter was settled. The second report of the review panel was submitted to the Court in April 1995. The final hearing of the case began finally in November 1995 which went for six days. The next hearing started on March 12, 1996 when serious disagreements between various state governments interrupted the process and the Court ordered the governments to resolve their differences and report back in three months. July 18, 1996 was the next date for hearing. (The paper is based on the events until March 1996).

While the final decision of the Supreme Court is still pending, it is clear that the initiative has already won numerous concessions. It was successful in forcing the government to accept the review process. Although the review panel was comprised of mainstream experts who subscribed to the conventional development standpoint, the initiative was successful in presenting its case and eliciting a favorable report from the review panel. As well, the initiative has been successful in convincing the highest court of the land to remove a major constraint on acceptance of their position - the constitutional sanctity granted to the award of NWDT. Finally, it also convinced the Supreme Court that any further increase in height would cause increased submergence and, hence, should not be permitted. The Supreme Court banned all construction activity on the dam in such firm language that GOG has not dared to violate these orders.

A key element of grassroots strategy in the Narmada struggle has been to focus on its demand for cancellation of the project. The main arguments have been that: (a) the project is ill-conceived and severely flawed on techno-economic grounds; and (b) it is impossible to satisfy the environmental and R & R standards set by various agencies within the macro-system, with the given project design and in the prevailing situation. Two advantages of this strategy are clear. First, these arguments are addressable by arbitrating institutions of the macro-system and, therefore, it was difficult for these institutions to dismiss them easily as 'irrational' arguments. Second, while defending their own project

design, the project authorities were forced to explain why their design would work whereas scores of other similar designs had been dismal failures in the past. Macro-system agencies were vulnerable in these circumstances because their track record in the areas of R & R, environmental impacts and project implementation were historically poor. In effect, the macro-system had to defend not merely its design of Narmada project, but its full record of development projects. Involving the network of supporting institutions and individuals that included some of the best minds in the country was also an important component of the strategy adopted by the initiative.

Armed with its own analyses and helped by some of the best legal minds in the country, the initiative was successful in convincing the arbitrating institutions to the macro-system of key elements for opposition of the project. So far, it is a limited victory in the sense that the concerned arbitrating institution (the Supreme Court) from within the macro-system can, at best, conclude that because it is impractical and unjust to implement a flawed and costly project, it needs to be shelved or abandoned. But leaders and members of the initiative are quite clear that more is needed to force the macro-system to accept the concerns and perspective of the grassroots people and adopt an alternative development paradigm. This must be won through political battles for which it is preparing itself.

#### *Toward an Alternative Paradigm*

With respect to the future strategy of the struggle, the initiative must keep its options open, in case the verdict of the Supreme Court goes against it. It is quite probable that the Court will not recommend either cancellation of the project or continuation with the present project design but will try to find some middle ground. The Court's decision, thus, will shape both the struggle for as well as the final form of the alternative to the project. In one scenario, the verdict will prove helpful for the initiative to push forth its agenda as had happened in the case of the report of the Independent Review commissioned by the World

Bank. Alternatively, the Court's decision might prove to be an impediment for the initiative and its agenda, as had happened in case of the NWDT award. Aware of both possibilities, NBA has taken the position that it must plan for both types of outcomes.

As such an ambiguity over future course of the struggle still prevails, it is not yet clear whether the struggle will progress to the final 'Search for Alternative' phase or not. Nonetheless, the initiative is preparing for the final phase.

#### (a) Future Action Plan of the Initiative

In a recent publication, the initiative has outlined a course of action to shift the goals and practice of development in Narmada valley and India [NBA, 1995, Pp. 16-17]. Key elements of the action plan to be implemented in the Narmada valley and throughout India are:

(a) Programmes will be initiated to develop the areas occupied by the submerged communities, using the remaining natural resources and based on the concepts, principles and techniques of alternative development.

(b) Resistance to the other proposed big dams planned in the Narmada valley will be mounted by organising local people, raising awareness, engaging in dialogue, and launching a continuous struggle to redesign the entire Narmada Valley Development Plan on the basis of principles of decentralisation, environmental sustainability and equitable access to assets and resources.

(c) The scope of the struggle-related activities by the initiative and its supporters from all over the country will be expanded to support and nurture similar struggles in other areas and on other issues.

(d) By learning from the Narmada struggle, the problems of people displaced by other development projects will be approached and handled with the new perspective that evolved during the Narmada struggle.

(e) Wide-scale movements will be initiated to secure the rights of people from the threatened communities to question the project and to stop the project until they are convinced of its contribution to the livelihoods of affected people.

(f) Simultaneously, the already initiated process of in-depth and comprehensive discussions and further refinement of the draft document on the vision, strategies and programmes of alternative development will be intensified.

The NBA action plan also seeks to prepare grassroots responses to projects that initiate at the instance of or receive support from international sources. An organised basis to respond to interventions by the World Bank and multinational companies in the economy and politics of the country is being strengthened in conjunction with several grassroots movements in India.

The initiative is committed to practicing *paryayee vikas-neetee* (alternative development paradigm) in the Narmada Valley as well as in other areas. To accomplish this, NBA is organising a political movement focused on alternative development strategy. The action plan articulates several programmes in this direction to be carried out in the valley as well as at national and international levels. However, the initiative has been forced to devote most of its effort to thwart the construction of the dam and to push its demand for abandonment of the project. Nonetheless, the initiative has been engaged in an internal exercise of developing a comprehensive plan for implementing the *paryayee vikas-neetee*. As the struggle nears its resolution, the alternative to the project is gradually becoming a priority.

#### (b) The Proposed Comprehensive Alternative

Coming to the substantive component of the alternative, several proposals for an alternative to the SSP have been suggested by various individuals and groups. They can be divided roughly into two groups. The first group of alternatives essentially appreciates the problem of water scarcity faced by the state of Gujarat, but

emphasises on finding a solution without transferring Narmada water across river basins. Instead, extensive local watershed development programmes are stressed in these proposals. It is claimed that these watershed programmes would obviate the need of the SSP altogether. Another group of alternatives involve lowering the height of the dam. These proposals argue that the resulting reduction in the costs due to reduced submergence and displacement will be very high compared to the reduction of benefits to the state of Gujarat. The initiative has not taken an official position on either of these set of proposals for strategic reasons.

Apart from these two options, there is another interesting proposal put forward by Suhas Paranjape and K.J. Joy [Paranjape and Joy, 1995]. Suhas Paranjape is an engineer by training who has worked extensively in tribal areas. K.J. Joy is a social worker by training and has worked at grassroots level on the issue of irrigation. Both are known for their long-standing commitment to the grassroots agenda as well as for their rare and first-hand understanding of the ground-realities of the struggle for livelihood security. For a decade, both the authors have been part of the network of technical experts, social scientists and activists in India led by Mr. K. R. Datye working on developing a comprehensive alternative development strategy.

The Paranjape-Joy proposal, in the first place, accepts responsibility of transferring 9.2 MAF of Narmada water to Gujarat through the main canal, though it suggests restriction on the height of the dam to 107 meters instead of the original 140 meters, minimising submergence and displacement. Five distinguishing characteristics of this proposal make it interesting. First, this proposal comes from two individuals who have themselves been deeply involved in grassroots struggles at different places in the state of Maharashtra. Second, the proposal presents an elaborate and comprehensive techno-economic design of the alternative. This is essential and critical in order to effectively counter the accusation of project authorities in particular and of mainstream experts in general that grassroots alternatives are

either vague or incapable of addressing the magnitude of needs. Third, the proposal reflects an understanding of the prevailing political situation in the region. The Gujarat government has already publicly admitted that it no longer considers SSP as the lifeline of Gujarat, indicating a softening in its stand. However, it is politically impossible that GOG or people of Gujarat will forfeit their claim on using water from Narmada. Therefore, the proposal concedes the allotted quota of water to Gujarat while reducing the burden on affected communities.

Fourth, the Paranjape-Joy proposal is not merely a techno-economically sound compromise formula. It also suggests reorganisation of water sector - i.e., the dam, canals, rivers as well as local water resources (both surface and underground) - in an integrated manner so that a scarce resource like water could be used for an economically optimal, environmentally sustainable and socially equitable future. Finally, the most important characteristic of the proposal is that it transcends the usual tendency on the part of exponents of proposals for alternative to restrict themselves to securing basic needs or subsistence needs. The proposal involves thinking beyond the issues of food security and subsistence and presents a new approach to moving beyond subsistence and to a dispersed industrial society based on reorganised and integrated strategies for water, energy, land and biomass.

Further, Paranjape and Joy claim that the proposal reflects the agenda of the grassroots initiative:

The most important of these issues (uncovered in the process of struggle over SSP) are: the need to view any large-scale water resource development project within the larger context of an overall eco-resource development plan; paying adequate attention to equitable distribution of water within the service area of the project; the human and environmental costs of these projects; the people's right to know and to have access to accurate and comprehensive information about project which affect their lives; and the right of project-affected people not only to

adequate compensation, but to have a say in decision-making concerning the nature and design of the projects which affect them [Paranjape and Joy, 1995, p. 7].

This particular proposal has been discussed extensively in Maharashtra and Gujarat. Recently, it was published in book form by an NGO from Gujarat working on environmental education. The grassroots initiative has not taken any official position on this proposal. But activists involved in NBA have indicated in personal conversations with the author that, barring some technical and implementation issues, the initiative finds this proposal generally acceptable. The Paranjape and Joy proposal - in its earlier form - has also been presented to the review group appointed by the GOI which has made special mention of it in its preliminary report. There is a good probability that the proposal might become the basis of further discussion on evolving an alternative to the project.

#### CONCLUSION

The framework for the analysis of grassroots struggles described in Part I has been used here to examine a real-life struggle - the struggle against the Narmada dam project. The decade-long struggle has been addressed by several writers, but analysis to date has been focused on one or a group of key events (e.g., the Long March, the hunger-strikes), issues (e.g., R & R, environmental effects, claimed power benefits), or other important elements (e.g., role played by the World Bank, criticisms by the Independent Review). But when viewed in the perspective of the framework used here, these and other pieces of the struggle start falling together. The framework makes a complex battle intelligible by breaking down the evolution of the struggle into distinct phases that capture both the core issues confronting grassroots groups and an understanding of the ways in which grassroots responses relate to the evolution of the struggle.

In the Narmada case, a key turning point occurs when the grassroots initiative moves from an initial agenda of reformist demands to an agenda involving demand for cancellation of the project.

While the initiative was criticised by many for its controversial demand for total abandonment of the project, the framework helps make it clear that this stance was essential from the grassroots standpoint in order to protect the livelihoods of threatened grassroots communities. If the initiative had continued to focus on a particular project design or a particular package of R & R, there would have been little chance to significantly alter the livelihood consequences of the project. The dam design and compensation levels were never the issues from the grassroots standpoint. Rather, there are fundamental problems (such as the total neglect of the livelihood concerns of grassroots communities) with the conventional development standpoint underlying the project which is focused on achieving the objective of macro-economic growth. Seen in this light, the allegedly 'irrational' and 'impractical' demand for cancellation of the project can be understood as necessary to pursue the grassroots agenda.

The initiative was often criticised even by many of its sympathisers for its 'undue' emphasis on the organisation and participation of the grassroots communities at the cost of neglecting many 'urgent' matters and 'larger' issues. For example, it was repeatedly censured for not effectively responding to criticisms by developmentalists such as Dattaprasad Dabholkar, who presented arguments attractive to the urban middle-class. It was also criticised for failing to utilise the services of many of its reformist sympathisers who volunteered to help in developing a more sophisticated critique and alternatives to the project. The initiative was faulted, as well as, for not accepting the proposal of radical sympathisers who offered to work at the community level. In effect, for many, it seemed that NBA was preoccupied with consultations and organisation of local communities, even in the face of growing national and international interest in the struggle. But, from the perspective provided by the framework, these choices by the initiative reflect correct priorities. As the framework suggests, the participation of the grassroots communities and commitment to the grassroots agenda are critical strengths of an initiative. This makes it mandatory for the initiative to continuously work on strengthening the

organisation at the grassroots level and protecting the grassroots agenda from being overshadowed by reformist and radical agendas, especially in the critical stages of the struggle.

Some have challenged the initiative for adopting double standards by exploiting the judicial system using techno-economic, environmental and R & R issues while continuing with the political movement demanding total cancellation of the project and implementation of an alternative development strategy. But the framework points out that arbitrating institutions like the courts are part of the macro-system and essentially subscribe to the conventional standpoint. Hence, it may not be fruitful to raise livelihood-related issues in the courts. Whereas, it is strategically important to gain time to mobilise support for the grassroots standpoint. In this situation, the dual strategy adopted by the initiative is not only reasonable and acceptable but a model for others.

A recent study criticises the initiative for 'show-casing' tribal oustees from Maharashtra while not adequately projecting participation of *patidar* mainstream farmers from *Nimad* areas of MP in the struggle [Baviskar, 1995]. It is also pointed out that the down-trodden sections from *Nimad* are not connected with the struggle. According to the scheme of classification of actors proposed in the framework, the *patidar* farmers are not strictly grassroots people and hence are reformist allies of the grassroots tribal communities. The initiative is correct in not making out them as equal partners in the struggle. As regards the non-participation of the down-trodden sections in the *Nimad* region, it certainly is a major short-coming of the initiative which could be attributed to the lack of resources and manpower.

Finally, the framework also provides an important reminder to the grassroots activists leading the struggle. According to the framework, the ultimate challenge and objective of the struggle is not cancellation of the project but evolving and implementing a development

alternative emerging from the grassroots standpoint. This will require collaboration with outside experts, researchers and professionals, to evolve the development alternative which is practicable and contains sound techno-economic and institutional details. Further, successful implementation of the alternative will require dealing with an equally difficult political challenge - expansion of the political coalition supporting *paryayee vikas-neetee*.

#### POSTSCRIPT

As stated above, the paper is based on the events until March 1996. But the struggle is still languishing in the resolution phase. The comprehensive review petition is yet to be decided by the Supreme Court. However, the initiative has been successful in convincing the Supreme Court to continue the ban on the construction of the dam, despite repeated pleas by the GOG. On the one hand, the initiative is also working on maintaining the organisation in the affected areas. However, even the nucleus group has started showing signs of fatigue. On the other hand, there are reports that many families which were resettled in Gujarat are returning, despite efforts of the GOG and pressures of Gujarat police.

#### NOTES

1. In this paper, the word 'grassroots' is used to denote rural people not only in the sense of 'common people without influence', but also to emphasise that these communities survive and earn livelihood largely by depending on self-labour and skills, inherited knowledge and natural resources in surrounding areas.

2. Development affects grassroots communities in a multitude of direct and indirect ways. For example, in the last decade, the Raigad district in Maharashtra saw a build-up of chemical industries spilling out of the metropolis of Mumbai, and development of tourist and recreational facilities for the benefit of the elite from Mumbai. Development, in this twin form, has robbed local tribal people of their lands, forests, rivulets, water, and fish. In addition to these direct effects, there have been many indirect but equally devastating impacts suffered by tribal people in the area. For example, there are many cases where impoverished, unemployed tribal youths, deprived of their traditional occupations and unable to get industrial employment are being enticed into criminal activities, especially bootlegging. Similarly, there are instances wherein young tribal women in search of survival of their families have been molested and, sometimes, forced into prostitution.

A local activist pointed out another subtle and indirect manner in which development affects especially the elderly

and young. According to her, because of industrialisation and related secondary activity in the area, large numbers of impoverished rural people have poured in from all over the country attracted by new jobs. The local secondary and tertiary markets, which earlier used to cater to tribals, are attracted to these new clients (migrant labour) who earn cash incomes. This new clientele has effectively priced out local tribal people who earlier used to barter their own produce in exchange for small amounts of commodities for the basic necessities of life. Now tribal people have little or no access to local secondary markets. As a result, they either have to trek 20-25 miles in search of secondary markets in more remote areas or move out. This lack of access to local markets has severely affected livelihoods of these communities and, especially, the lives of young and elderly members.

3. NEP is the Indian version of the Structural Adjustment Programme sponsored by the International Monetary Fund (IMF). The central government that assumed power in 1991 accepted the dictums of IMF when it sought loans in response to a severe balance of payment crisis. The salient features of NEP are: devaluation of Indian currency, liberalisation of economic and financial policies and drastic reduction in central government expenditure. It is feared by many that NEP has already contributed to the marginalisation of a large section of the Indian population while enriching the economic and political elite of the country.

4. The term model includes various theoretical propositions, policy prescriptions and programmes that emerged from the conventional standpoint.

5. A large body of literature is available on conventional standpoint. For example: Alexander, 1994; Arndt, 1987; Gill, 1973; Hagen, 1962; Hunt, 1989; Harrison, 1988; Kuznets, 1966; Larrain, 1989; Preston, 1986; Rostow, 1971; Sharma, 1992; So, 1990; Webster, 1984.

6. The two terms are italicised here to highlight the controversial character of this basic proposition of the conventional standpoint. The controversy pertains to the tendency on the part of the colonising Western countries to club together all other societies on the globe into a single category. In doing so, this tendency simply neglects the rich histories of these societies extending thousands of years in the past. It also overlooks their immensely diverse social structures, knowledge-systems and cultural traditions, as well as equally diverse economic aspirations, norms and achievements. Objections are also raised against the 'euro-centric' mind-set of the Western societies which prompts them to brand this group of societies in condescending terms such as 'underdeveloped' or 'developing' and, in turn, try to establish themselves as yardsticks of human progress.

7. There is a considerable volume of literature on various shades of radical thought. For example: Agarwal and Narain, 1989; Clark, 1991; Court, 1990; Friedmann, 1992; Korten and Klaus, 1984; Kothari, 1990; Mellor, 1993; Merchant, 1982; Pereira and Seabrook, 1992; Redclift, 1987, 1992; Shiva, 1988.

8. In the case of some radicals (environmental as well as cultural) believing in the inherent goodness of the 'primal' or 'rural' societies, the lives at the grassroots are something to celebrate. But, as long as their understanding is rooted in theory and ideological beliefs, and as long as their livelihoods are not at risk from development, their view is likely to remain 'vertical.'

9. The 'horizontal' grassroots stand-point is in a disadvantaged position as far as macro issues are concerned and, in the given world, even the grassroots communities can neglect the macro issues only at their own peril. The point of concern here is the total exclusion of grassroots stand-point from the theory and practice of development. So, it is not the substitution of the conventional by grassroots stand-point, but merely inclusion and equal consideration of the grassroots stand-point in development theory and practice is the underlying suggestion. Practically, this would mean participation of grassroots communities in making decisions not only about their rehabilitation package but even over the need, viability and desirability of such development projects affecting them. It is arrogant to assume that grassroots communities will be too self-centered to dismiss the arguments for 'sacrifice in the national interest', even if the arguments are valid and proper rehabilitation is carried out before the project starts.

10. The reformist and, with some exceptions, radical elements are part of the macro-system because they are dependent on the macro-system for their livelihoods. Because the reformist elements do not have serious difference of opinion with the conventional standpoint, they, for all practical purposes, can be considered part of the macro-system. This is not the case with radical elements who question the very core of the conventional standpoints. Though they take antagonistic positions, they do not have much influence on thinking or functioning of the macro-system.

11. The term initiative is used here to suggest an organised collective effort to resist the conventional development standpoint and to propose and work for the grassroots standpoint on development.

12. It should be noted that some activists and groups working at the community level may represent radical or reformist standpoints. Further, some of these radical and reformist elements, because of their first-hand exposure to the grassroots reality and participation in the struggle, may be undergoing transformation to grassroots standpoint.

13. Parallels can be drawn in two enviro-development struggles in India reported in the case study literature. One is the struggle against the DuPont plant in Goa, India, in the case of which the company had embarked on a massive publicity campaign to assure local people that its production processes were 'as safe as baking a cake'. Subsequently, the activists managed to get a copy of an internal e-mail message discussing threats posed by two chemicals to be used in the processes [Cohen and Sarangi, 1995, Pp. 563-65]. The other struggle concerns the revived Koel-Karo project in Bihar. The government sanctioned financial allocation for acquisition of land secretly without informing people and carrying out any mandatory procedures [Bhuskute, 1995].

14. For example, the struggle against the DuPont plant in Goa was intensified after the public meeting between officials and village people in which various claims (especially about environmental benignness) made by DuPont were exposed in a face-to-face encounter by community leaders, activists, experts and villagers settled outside [Cohen and Sarangi, 1995].

15. Many times, multinational corporations form local companies that pose as local economic interests interested in developing local economies and bringing in growth and jobs to local people. This creates confusion among various local groups. Two prominent examples in the case-study literature



on this point are the operations of RTZ in Honduras and of DuPont in Ecuador [Gedicks, 1995; Moody, 1996].

16. The activities include mass rallies, gherao (circling and blocking the officials), *dharana* (sit-ins), *rasta-roko* (road blocking), *marcha* (protest marches), hunger-strikes, etc.

17. There are many instances of loss of life during the Eruption stage of struggles. Sometimes, the loss occurs due to government efforts to quell protest activity. For example, protesting local people have died by police firing during the struggles against the Narmada dam and the DuPont plant in India [Cohen and Sarangi, 1995; NBA, 1994]. Sometimes, this takes the form of murderous attacks on activists involved in protests, as experienced by 'Earth First!' activist Judi Bari in Northern California and local activists in Brazil and other Latin American countries [Bevington, 1993; Durning, 1989]. Occasionally, it comes in the form of state-sponsored violence, as it happened in the case of execution of the Nigerian environmental activist Ken Saro-Viva.

18. This has recently happened during the struggle against revival of the Koel-Karo project in Bihar, India. Local people imposed a 'people's curfew' against the Chief Minister of the state and Prime Minister of India who were visiting the area to lay the foundation stone of the project. With such an effective show of political strength by local people, the government agencies finally decided to appoint a committee to reconsider the project [Bhaskute, 1995].

19. Sensing similar dangers, Claude Alvares, the noted environmental activist engaged in the court battle against the DuPont plant in Goa, pointed out to his fellow-activists the importance of continuing with vigorous political action programmes as the main strategy rather than relying on legal and legislative fights [Cohen and Sarangi, 1995].

20. In the case of the Silent Valley project in Kerala, India, the project was dropped as the then Prime Minister of India, Indira Gandhi, who was pursuing an environmental agenda at the international level, found the controversy too embarrassing [Karan, 1994]. In the case of the DuPont struggle, after the death of a local youth in police firing, the state government and the Indian partner of DuPont found it politically impossible to continue with the project. The project then was shifted to the neighboring state of Karnataka and, later, the Indian partner walked out of the project [Cohen and Sarangi, 1995].

21. This could be witnessed in the recent struggle against the new policies liberalising the coastal fishing zones in India and opening them for the entry of foreign trawlers. About 8 million fishing people from the entire coast line of India revolted against this policy. Recently, the government-appointed committee headed by a former bureaucrat recommended repealing the entire policy. But the central government has yet to act on the report.

22. The dam is named after Sardar Vallabhabhai Patel, a national leader of the freedom struggle.

23. 'Encroachers' are defined as 'those residing on and cultivating land to which they do not have a legal title' and 'major sons' are 'sons over the age of eighteen' in the affected families [Fisher, 1995a, p. 31].

24. Various studies have discussed the techno-economic issues in detail. See, for example, [Dharmadhikary, 1995; Patkar, 1988; Ram, 1995; Shah, 1995].

25. Patkar [1988], Ram [1995] and Shah [1995] elaborate on these objections as well as on counter-arguments to responses from project authorities. One example is: the cost

of one hectare of forest lost due to submergence plus cost of plantation of one hectare of new forest is assumed in the project calculations to be Rs 146 only, whereas MOEF estimates suggest that the total loss due to the submergence of one hectare of forest is about Rs 12.6 million [Patkar, 1988, p. 3].

26. Dharmadhikary [1995], Ram [1995] and Shah [1995] provide detail analyses of the claims of these benefits.

27. Alvares and Billoray [1988] and Dabholkar [1990] as well as the first report of the Jayant Patil Committee (the expert review panel appointed by the GOI; released in December 1994, unpublished) discuss this issue in detail.

28. Vijay Paranjape and his colleagues completed in 1993 a study in which they argue that the irrigation and drinking water benefits equivalent to those of SSP could be achieved with extensive watershed programmes in Gujarat river valleys with lower economic costs and with a fraction of the human and environmental costs. The study is yet to be published. The report can be obtained from Vijay Paranjape, Ganagote Path, Opposite Kamla Nehru Park, Erandavana, Pune, 411-004, India.

29. NBA [1994, 1995] and Patkar [1995] discuss these issues in detail.

30. The grassroots agenda, its evolution, and the questioning of the project that led to the demand for total opposition to the dam are discussed in the next section on analysis of the Narmada controversy.

31. The paragraph is translated by the author from the Hindi book referred to.

32. ARCH stands for Action Research in Community Health and Development and Vahini means an organisation. ARCH-Vahini is a voluntary agency from Gujarat active in the areas of rural health and development.

33. These include OECF of Japan, KFW of Germany, Canadian International Development Agency (CIDA), and Overseas Development Administration (ODA) of UK, each funding some parts of the project (Patkar 1995, 175).

34. Anil Patel [1995] provides a detailed account of Vahini's efforts.

35. The nucleus group of outside activists has no separate existence and has been working since the beginning of the struggle as a part of the grassroots organisations. It is identified as a separate entity in this analysis as it has played a critical role in this struggle.

36. These indefinite hunger strikes lasted for 14 days in June 1993, 22 days in January 1991 and 26 days in November 1994.

37. This refers to the former Chief Minister of Gujarat, the late Chimanbhai Patel, who had a very controversial but successful political career. In 1975, he became the first chief minister to be overthrown by a student movement protesting his corrupt government. After two decades of political machination, he became the Chief Minister of the state leading Gujarat in implementing the Narmada project. He died in 1994.

38. Dattaprasad Dabholkar is director of a private, industry-oriented research institute based in New Delhi. He is a high-profile scientist and prolific writer in Marathi. He has written books on various themes including scientific, political and development issues.

39. *Paryayee Vikas-Neetee* is certainly not a well articulated, comprehensive and detailed alternative for conventional

development practice evolved over the last five decades. Also, it has not been tested anywhere in reality in its comprehensive form. *Paryayee vikas-neetee* today exists, at best, in the form of alternatives at sectoral levels as well as some technical and social experiments. On the one hand, the macro-system institutions have refused to take these ideas and suggestions seriously, perhaps because it found them subversive. On the other hand, very few activists and researchers have been able to carry out detailed and systematic work on techno-economic, managerial, financial, institutional and other aspects of *paryayee vikas-neetee*. As a result, many proponents of the conventional model tend to dismiss the arguments for alternative outright. The supporters of *paryayee vikas-neetee* have two counter-arguments. First, they argue that *paryayee vikas-neetee* is forced by the 'conventionalists' in a trap. On the one hand, because it is yet to be ready in a comprehensive and articulated form, the conventionalists refuse to implement it in practice. On the other hand, because it is not yet tested anywhere, they refuse to recognise its potential and importance and allow macro-system institutions and experts to work on it. Secondly, it is also argued that *paryayee vikas-neetee* is not supposed to be a well articulated, compact, unique prescription to be applied universally like the conventional development practice. It is essentially a broad framework and a set of norms which will allow people to find their own definitions of human progress and work for them in ways that are commensurate with their aspirations, histories, cultures, social norms and political choices. Hence, there cannot be a blue-print of *paryayee vikas-neetee* similar to the one of the conventional development practice. So, the only way *paryayee vikas-neetee* could evolve is through economic, social, institutional and other experiments of groups of people, communities, villages and towns. In a way, these two sides are diametrically opposite in not only the process and method, but also in the substantive content and goals of development. In this situation, many protagonists of *paryayee vikas-neetee* suggest that the conventional development theory and practice should, at least, give up its exclusionist approach and stop their 'neo-colonial' invasion - encroaching on the rights and resources of people and communities who wish to abstain. Further, the conventional practice should also allow some space for people and communities who want to chart their own path to progress without encroaching upon other peoples' rights and resources.

40. As a face-saving measure, GOI was allowed to withdraw its request to the World Bank for a project loan in March 1993.

41. This part of order from the highest court in India was important because the state governments had taken the position that the award (which had constitutional sanctity) was binding on all, and changes in or review of the project could be made only within the framework of the award. This position effectively made a comprehensive review of the project impossible because the award had stipulated some basic parameters of the project which themselves were the roots of the problems. Even the GOI had restricted the TOR of the 1993 review panel, citing this restriction.

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# FACTORS INFLUENCING ONION PRICES IN INDIA

A.P. Kulkarni and Prema Basargekar

*This study attempts to identify factors influencing onion prices and quantify their influence. Onion prices witness a good deal of seasonality, which is larger in prices prevailing in producing markets than in overall all-India prices. The acreage under onion seems to be influenced by prices prevailing in the previous two years, while the export quantity is influenced by domestic prices and domestic production. The onion prices themselves are influenced by the production in the previous year, exported quantity in the previous year and export price in the current year. The per capita production of onion does not show any increasing or decreasing trend. The study highlights areas of further research and policy implications.*

## I. INTRODUCTION

Onion (*Allium cepa*) is one of the most important vegetables grown in India. It is also the oldest cultivated vegetable in the world. It is believed to have originated in Central Asia and is presently grown in most parts of the world. It is an essential ingredient in Indian diet and is used as vegetable or as an addition of flavour to several vegetarian and non-vegetarian dishes. Uncooked fresh onion is used also as salad. Onion has medicinal values and is also used for this purpose. For India, onion is a consistent earner of foreign exchange and the exports of onion and onion products reach several destinations.

The present article seeks to examine prices of onion in India and their association with other factors. There are wide fluctuations in monthly prices, which lead to seasonality and which cause a perpetual concern to producers. There are also fluctuations in annual prices which are cyclical in nature and which, in turn, affect the export performance. The objective of this study is to understand the nature of these fluctuations and the factors influencing them.

Before we go further, a note of caution on the data used must be made. The data are taken from a number of sources. They are not always comparable (due to differences in methodologies, years considered, etc.). Again, they are not always available for the same time duration. For the price analysis, a period of 15 years is used

because all the data required for this study are available for these years (1978-79 to 1992-93). For individual aspects, the data may be available for a longer duration. Wherever this is available, it is used in the examination of individual aspects. The figures of yields in India are derived by us from the information on area and production; those that are available in official statistics do not match with these figures for all years. The only available all-India series of onion prices for a long duration is the wholesale price index for onions. This index is compiled from prices prevailing in selected major markets in India and is used by the Government of India for constructing the all-India Wholesale Price Index for all commodities and for different sectors. This index is published weekly and is used by us with the assumption that it is representative of onion prices prevailing in India.

## II. WORLD PRODUCTION

World production of onion has grown significantly; from 7.5 million tonnes in 1960, it has increased to 32.5 million tonnes in 1994 (Table 1).

Onion is grown all over the world; China and India, however, with their respective shares of 14.3 per cent and 12.3 per cent in 1995 top the countries (Table 2). Other major producers in 1995 are Turkey, USA, Japan, Spain, Pakistan and Egypt. These eight countries account for over 56 per cent of the world production of onion.

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Table 1. World Production of Onions

Years	Area ( <sup>0</sup> 000 ha)	Production ( <sup>0</sup> 000 m.t.)	Yield (kg/ha)	Years	Area ( <sup>0</sup> 000 ha)	Production ( <sup>0</sup> 000 m.t.)	Yield (kg/ha)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1960	630	7,460	11,841.3	1978	1,559	18,243	11,701.7
1961	630	7,440	11,809.5	1979	1,562	19,639	12,573.0
1962	640	8,040	12,562.5	1980	1,571	19,204	12,224.1
1963	712	8,839	12,414.3	1981	1,604	19,780	12,331.7
1964	1,129	12,504	11,075.3	1982	1,632	22,912	14,039.2
1965	1,144	12,476	10,905.6	1983	1,649	22,245	13,490.0
1966	1,186	13,001	10,962.1	1984	1,663	23,109	13,896.0
1967	1,223	13,618	11,134.9	1985	1,733	24,852	14,340.5
1968	1,248	13,680	10,961.5	1986	1,705	24,764	14,524.3
1969	1,283	14,131	11,014.0	1987	1,766	25,282	14,316.0
1970	1,245	14,164	11,376.7	1988	1,777	25,826	14,533.5
1971	1,232	14,337	11,637.2	1989	1,819	27,175	14,939.5
1972	1,245	14,117	11,339.0	1990	1,866	27,405	14,686.5
1973	1,356	15,235	11,235.3	1991	1,886	27,977	14,834.0
1974	1,406	16,236	11,547.7	1992	1,893	29,776	15,729.5
1975	1,427	16,031	11,234.1	1993	1,927	30,278	15,712.5
1976	1,488	17,300	11,626.3	1994	2,023	32,546	16,088.0
1977	1,544	18,832	12,196.9	1995	2,082	32,402	15,562.9

Source : Food and Agriculture Organisation, (FAO) *Production Yearbook (PY)*.

Table 2. World Production of Onion

Country	Area					Production				
	( <sup>0</sup> 000 ha)			% of Total Area		( <sup>0</sup> 000 m.t.)			% of Total Production	
	1981	1991	1995	1981	1995	1981	1991	1995	1981	1995
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
China	211	251	266	13.15	12.78	2,646	3,980	4,629	13.38	14.29
India	249	326	380	15.51	18.25	2,551	3,400	4,000	12.90	12.34
Turkey	71	83	140	4.42	6.72	1,017	1,700	2,850	5.14	8.80
USA	47	54	64	2.93	3.07	1,625	2,277	2,741	8.22	8.46
Japan	29	29	30	1.81	1.44	1,149	1,299	1,200	5.81	3.70
Spain	32	27	29	1.99	1.39	950	1,004	1,032	4.80	3.18
Pakistan	41	60	75	2.55	3.60	424	750	1,013	2.14	3.13
Egypt	19	10	21	1.18	1.01	609	493	980	3.08	3.02
Brazil	70	77	73	4.36	3.51	721	891	907	3.65	2.80
Korean Rep	9	10	9	0.56	0.43	316	530	500	1.60	1.54
Argentina	15	21	22	0.93	1.06	247	420	491	1.25	1.52
Netherlands	11	13	12	0.69	0.58	474	497	453	2.40	1.40
Italy	21	18	15	1.31	0.72	518	486	450	2.62	1.39
Indonesia	52	78	75	3.24	3.60	222	410	430	1.12	1.33
Chile	9	9	10	0.56	0.48	265	280	350	1.34	1.08
Total World	1,605	1,886	2,082	100.00	100.00	19,780	27,977	32,402	100.00	100.00

Source: FAO PY.



**Table 3. Yield of Onion in Major Countries**  
(Tonnes per ha)

(1)	1981 (2)	1991 (3)	1995 (4)
China	12.54	15.86	17.40
India	10.24	10.43	10.53
Turkey	14.32	20.48	20.36
USA	34.57	42.17	42.82
Japan	39.62	44.79	34.40
Spain	29.69	37.18	35.58
Pakistan	10.34	12.50	13.51
Egypt	32.05	49.30	46.67
World	13.27	14.83	15.56

Source: FAO PY.

Among all these eight countries, India has the lowest yield of onion (Table 3). At 10.5 tonnes per hectare in 1995, India stands well below Egypt (46.7), USA (42.8), Spain (35.6), Japan (34.4), Turkey (20.4), China (17.4) and Pakistan (13.5). Moreover, while the countries like China, Turkey, USA, Spain, Pakistan and Egypt have increased their yields during 1981-1995, the yield in India has remained almost stagnant.

### III. PRODUCTION IN INDIA

The information on area, yield and production of onion in India is presented in Table 4 and Charts 1-A, 1-B and 1-C.

Both area and production have increased during 1978-79 to 1993-94. The area has increased from 210 thousand hectares to 320 thousand hectares and production from 2,200 thousand tonnes to 3,616 thousand tonnes. The increase in area is, however, not continuous and there are year-to-year variations. There does not seem to be any increasing or decreasing trend in the yield (per ha). It is moving around 10.4 tonnes per ha, the yearly fluctuations caused chiefly due to the changes in weather conditions. Some indications of regular cyclical fluctuations are also apparent in the figures of yield. Yearly variations in production are thus due both to the variations in yield and area. Between the two, yield is more variable (coefficient of variation being 96.2 per cent) than area, which has a coefficient of variation of 11.9 per cent.

**Chart 1A. Area under Cultivation of Onion in India**

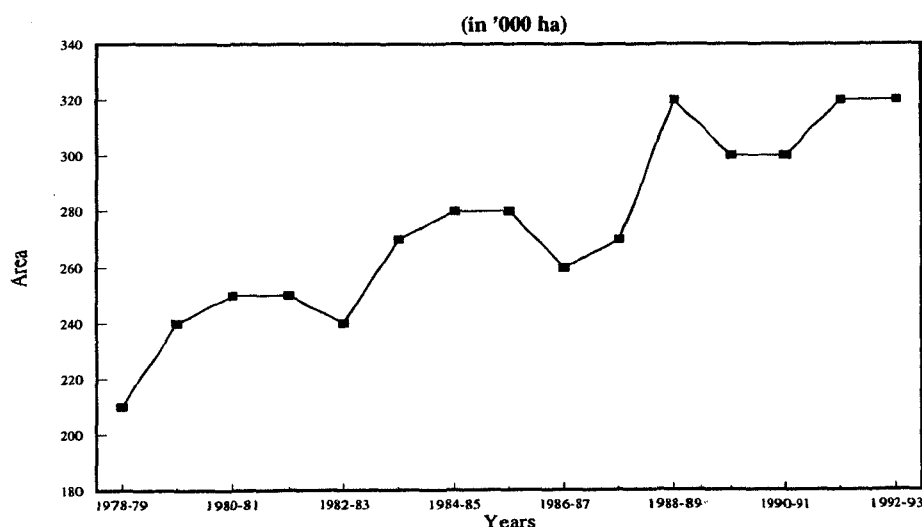


Chart 1B. Yield of Onion in India  
(kg per ha)

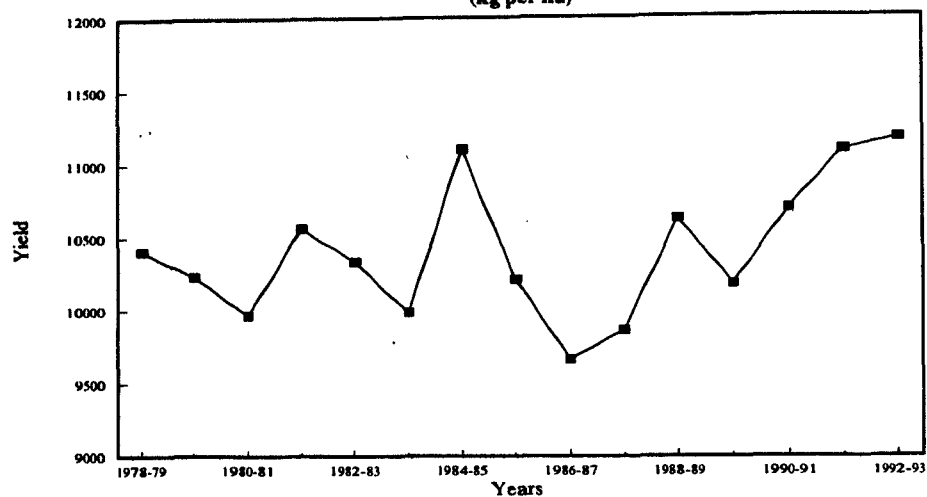


Table 4. Area, Production and Yield of Onion in India

Years	Area ( <sup>'000</sup> ha)	Production ( <sup>'000</sup> t)	Yield kg per ha
(1)	(2)	(3)	(4)
1978-79	210	2,200	10,403
1979-80	240	2,500	10,232
1980-81	250	2,570	9,961
1981-82	250	2,650	10,562
1982-83	240	2,430	10,330
1983-84	270	2,700	9,982
1984-85	280	3,100	11,100
1985-86	280	2,860	10,202
1986-87	260	2,530	9,659
1987-88	270	2,700	9,857
1988-89	320	2,950	10,620
1989-90	300	3,070	10,176
1990-91	300	3,230	10,686
1991-92	320	3,580	11,088
1992-93	320	3,590	11,168
1993-94	318	3,616	11,371

Source: Singhal, 1995, Pp. 153-158.

Yield figures are derived from production and area.

The state-wise figures of area, yield and production are given in Table 5. Maharashtra, with its share of 21 per cent, leads all other states in the production of onion. It is followed by Gujarat, Karnataka, Uttar Pradesh and Orissa. These five states, taken together, account for 75 per cent of total production of onion (1993-94). During the period between 1980-81 to 1993-94, the share of

Maharashtra seems to have decreased from 27 per cent to 21 per cent. The shares of Gujarat, Karnataka and, to a smaller extent, of Uttar Pradesh have, however, increased. There are large variations in yield among different states in India (Chart 2). Gujarat tops all the other states, with a yield of 23.3 tonne, which is 2.24 times that of all-India average.

Chart 1C. Production of Onion in India  
(in '000 Tonnes)

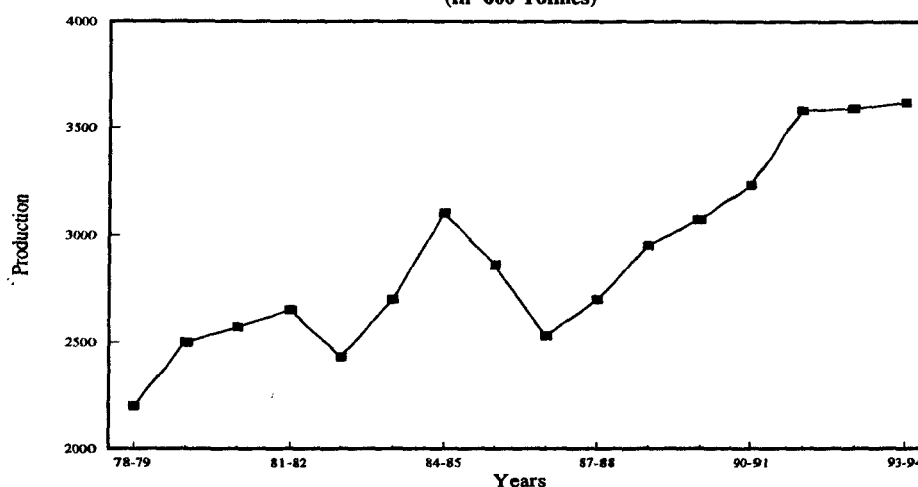
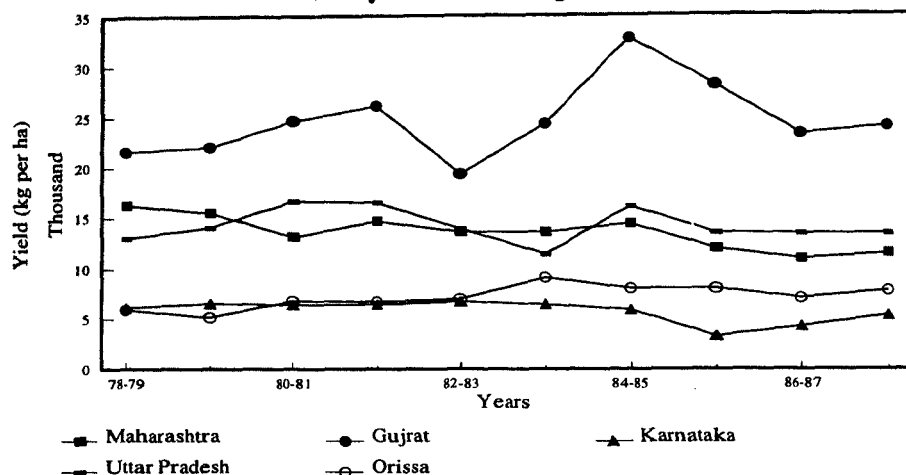


Table 5. State-wise Production of Onion in India

State (1)	Area ('000 ha)			Production ('000 t)			% of Total Production		
	1980-81 (2)	1990-91 (3)	1993-94 (4)	1980-81 (5)	1990-91 (6)	1993-94 (7)	1980-81 (8)	1990-91 (9)	1993-94 (10)
Maharashtra	52.3	66.5	55.0	684.3	804.0	764.3	26.6	25.5	21.1
Gujarat	11.6	17.9	26.0	285.3	463.6	605.5	11.1	14.7	16.7
Karnataka	35.5	39.3	56.0	227.4	251.0	520.0	8.8	8.0	14.4
Uttar Pradesh	19.5	28.5	32.0	324.1	406.0	480.0	12.6	12.9	13.3
Orissa	43.1	43.9	45.0	291.2	294.8	335.0	11.3	9.4	9.3
Madhya Pradesh	13.0	17.3	18.0	134.6	204.4	230.0	5.2	6.5	6.4
Tamil Nadu	19.7	21.3	22.0	196.2	207.9	191.0	7.6	6.6	5.3
Andhra Pradesh	16.5	19.8	20.0	114.7	176.2	172.0	4.5	5.6	4.8
Rajasthan	9.6	16.9	20.0	28.4	121.6	130.5	1.1	3.9	3.6
Bihar	15.1	14.1	12.0	100.3	113.6	108.3	3.9	3.6	3.0
Haryana	2.0	2.5	3.0	37.8	39.9	48.0	1.5	1.3	1.3
Others	12.1	8.9	7.5	145.7	65.6	31.8	5.7	2.1	0.9
Total	250.0	296.9	316.5	2,570.0	3,148.6	3,616.4	100.0	100.0	100.0

Source: Chandhok, 1990, Vol. II, Pp. 832-35.

Chart 2. Yield of Onion  
in Major Onion Producing States in India



There is also a good deal of concentration of onion production in few districts [GOI, 1992, Pp. 446-449]. The first five districts producing onion are Bhavnagar (Gujarat), Nasik and Pune (Maharashtra), Cuddapah (Andhra Pradesh) and Bijapur (Karnataka). They together, accounted for 30 per cent of India's production in 1989-90. There are 18 districts accounting for over 50 per cent of India's production. Their state-wise distribution, and per cent shares in all-India production (1990-91) are given below:

Maharashtra:	Nasik (8.4), Pune (6.6), Dhule (2.0), Ahmednagar (1.5), Solapur (1.4), Satara (1.4)
Gujarat:	Bhavnagar (10.6), Rajkot (1.9)
Andhra Pradesh:	Cuddapah (2.3), Kurnool (1.5)
Karnataka:	Bijapur (2.0), Chitradurga (1.8), Dharwad (1.5)
Uttar Pradesh:	Badun (1.8)
Orissa:	Bolangir (1.7), Dhenkanal (1.5)
Madhya Pradesh:	East Nimar (1.6)
Tamil Nadu:	Coimbatore (1.3)

(Note : Bracketed figures show proportions of India's production in 1989-90)

These major districts, although few in number, are thus widely distributed all over the country.

Onions grown in these major districts not only satisfy local demand, but also serve the important urban markets outside the district boundaries.

Onion is grown in four seasons (Table 6). The bulk (around 60 per cent) is grown as a Rabi crop, sown in the months of October-November and harvested in April-May. Two other seasons, *Kharif* (harvested in September-December) and late *Kharif* (harvested in January-March), each contribute about 18 per cent of onion production. The early *Kharif* season crop, which is harvested in July-August accounts for 4 per cent of production and satisfies partially the off-season demand.

If it is assumed that the demand for onion is evenly spread during the year, it becomes apparent that it is the *Rabi* crop which has to be stored for a longer time and satisfy this demand. The quantum of production and arrivals of the *Rabi* crop, therefore, should be a major factor influencing onion prices in India.

Table 6. Sowing and Harvesting Seasons for Onion in India

Season (1)	Sowing Months (2)	Harvest Months (3)	% of Total Production (4)
Early Kharif	March-April	July-August	4.5
Kharif	May-June	September-December	18.5
Late Kharif	August-September	January-March	17.0
Rabi	October-November	April-May	60.0

Source : Pandey, 1993, p. 3.

There are several varieties of onion grown in India. The onion marketed in India is distinguished on the basis of the colour of its skin (main colours being red, yellow and white), pungency, size (15 mm to 60 mm), injuries and other defects. The regional markets have their preferences as well, with the North-Eastern regions consuming small-size onions while Delhi market requiring big size ones. For dehydration, the onions with higher pungency are regarded as suitable.

#### IV. UTILISATION

Onion is mostly consumed in fresh form both in India and other countries. It is used as vegetable and for flavouring various dishes. Onion is also used in small quantities for pickling and for preserving in vinegar. One major commercial application which is gaining popularity is dehydration of onions. The dehydrated onions are marketed either in the form of powder or flakes. They are used in preparation of spices, convenience foods, sauces and ketchups, meat products, sausages, etc. For dehydrated onions, varieties of pure white flesh and high pungency are preferred.

Although no statistics on production are available, India does produce small quantities of dehydrated onions (mainly in Gujarat), a small part (around 6,000 tonnes) of which is exported. The manufacture of dehydrated onion is also reportedly undertaken in large quantity in the USA.

The per capita annual availability of fresh onions (estimated by deducting exports and adding imports to production) in India is quite low as compared to other countries. In 1995, it was 4.10 kg for India, 3.81 kg for China, 46.8 kg for Turkey, 10.14 kg for USA, 11.30 kg for Japan and 20.0 kg for Spain.

#### V. WORLD TRADE

The total world exports of fresh onion (1994) are around 3,136 thousand tonnes, forming around 9.6 per cent of world production (Table 7). Netherlands, with a share of 19.9 per cent in 1994 tops the list of exporting countries (Table 8), followed by USA (11.8 per cent), India (9.7 per cent), Spain (7.7 per cent) and Mexico (6.5 per cent). The major importing countries (Table 9) are Germany (with a share of 9.4 per cent), USA (7.9 per cent), UK (7.1 per cent), Japan (6.7 per cent), Saudi Arabia (5.8 per cent) and Malaysia (5.3 per cent). USA is both importing and exporting onions in large quantities probably because of the presence of onion processing industry in this country and for balancing its season and off-season demand-supply.

During the period 1988-1994, India's share in the world export seems to have remained constant at 9.7 per cent although USA, New Zealand and Egypt have increased their share. More significantly, China has increased its share from 0.58 per cent to 2.18 per cent. The total world exports in this period have increased by 42 per cent in quantity and 91 per cent in value. Among the leading exporters, the price realisation of Indian exports seems to be the lowest at around US\$ 206 per tonne. Other major countries received more price, at least by US\$ 100 per tonne during 1988 to 1994.

The information on international statistics on dehydrated onions is not readily available. One source places the import of dehydrated onions by European Union at 31.1 million tonnes (in 1993) [Centre for the Promotion of Imports from Developing Countries (CPIDC), 1995, p. 57].

Table 7. World Trade in Onions

Years	World Imports		World Exports		Export Value (\$ per tonne)
	(m.t.)	('000\$)	(m.t.)	('000\$)	
(1)	(2)	(3)	(4)	(5)	(6)
1960	7,51,885	55,329	8,15,154	45,749	56.12
1961	8,29,983	71,167	8,30,522	56,361	67.86
1962	9,16,931	92,724	9,21,286	71,704	77.83
1963	9,34,151	85,632	9,29,592	68,626	73.82
1964	9,98,176	87,164	10,42,161	74,322	71.32
1965	9,78,392	93,792	9,75,995	74,810	76.65
1966	9,42,920	94,177	9,40,747	71,660	76.17
1967	9,77,058	1,15,654	9,87,856	90,167	91.28
1968	9,95,069	95,961	9,76,958	74,753	76.52
1969	10,93,909	1,15,234	10,88,862	93,965	86.30
1970	11,32,973	1,46,932	11,45,991	1,19,530	104.30
1971	11,06,676	1,11,575	11,17,182	91,728	82.11
1972	9,81,446	1,16,111	10,73,133	1,03,870	96.79
1973	11,11,443	2,13,570	11,51,258	1,86,070	161.62
1974	12,03,160	2,99,400	11,87,286	1,77,104	149.17
1975	11,28,921	2,32,024	12,23,827	2,14,714	175.44
1976	12,56,729	3,40,421	13,22,774	2,99,308	226.27
1977	13,93,840	3,42,446	14,02,197	2,80,922	200.34
1978	14,67,168	3,14,166	14,62,494	2,39,502	163.76
1979	14,84,731	3,81,905	14,15,820	2,85,606	201.72
1980	16,34,366	5,13,369	16,16,255	4,01,874	248.65
1981	17,86,823	5,76,792	19,18,907	4,81,868	251.12
1982	16,79,889	4,04,942	16,81,870	3,36,575	200.12
1983	17,41,058	3,78,079	17,49,620	3,13,750	179.32
1984	19,05,002	5,34,623	18,79,337	4,16,977	221.87
1985	18,18,381	3,73,273	17,89,334	2,83,313	158.33
1986	19,23,078	4,35,805	19,51,731	3,45,034	176.78
1987	20,74,065	6,25,023	20,55,353	4,58,878	223.26
1988	21,59,317	6,03,457	21,65,159	4,72,033	218.01
1989	21,28,306	5,84,134	20,26,133	4,56,009	225.06
1990	23,53,808	7,30,486	23,08,860	6,03,408	261.34
1991	23,33,019	7,42,354	23,72,591	6,37,132	268.54
1992	25,86,979	7,78,874	25,77,541	7,12,790	276.54
1993	25,85,542	8,00,779	26,71,631	7,52,821	281.78
1994	30,90,593	11,24,168	31,36,294	10,16,885	324.23

Source: FAO, *Trade Yearbook (TY)*.

Table 8. Major Onion Exporting Countries

Country	Export Qty ( <sup>0</sup> 000 m.t.)		Per cent of Total Quantity		Export Value (m.\$)		Per cent of Total Value		Export Value Per Tonne (\$)	
	1988	1994	1988	1994	1988	1994	1988	1994	1988	1994
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Netherlands	436.54	623.30	19.74	19.87	94.11	188.71	17.67	18.56	215.58	302.77
USA	118.79	370.15	5.37	11.80	32.91	129.89	6.18	12.77	277.06	350.90
India	214.34	305.21	9.69	9.73	44.32	62.98	8.32	6.19	206.80	206.34
Spain	274.02	242.07	12.39	7.72	60.87	80.76	11.43	7.94	222.13	333.62
Mexico	161.20	202.87	7.29	6.47	90.14	139.35	16.92	13.70	559.20	686.87
New Zealand	60.40	135.42	2.73	4.32	16.63	47.00	3.12	4.62	275.34	347.10
Egypt	50.09	130.80	2.26	4.17	12.44	20.41	2.34	2.01	248.39	156.02
U.A.E.	31.29	80.00	1.41	2.55	6.28	18.00	1.18	1.77	200.82	225.00
Australia	63.32	68.80	2.86	2.19	20.09	22.80	3.77	2.24	317.24	331.38
China	12.73	68.40	0.58	2.18	3.96	23.42	0.74	2.30	311.34	342.34
Turkey	31.29	62.75	1.41	2.00	6.28	12.45	1.18	1.22	200.82	198.41
Chile	43.10	53.15	1.95	1.69	9.41	13.77	1.77	1.35	218.31	259.16
Singapore	39.52	49.85	1.79	1.59	13.77	17.43	2.59	1.71	348.52	349.55
Italy	69.99	49.48	3.16	1.58	26.07	33.04	4.89	3.25	372.54	667.73
France	26.61	49.17	1.20	1.57	11.07	25.28	2.08	2.49	415.98	514.09
Hungary	49.39	35.75	2.23	1.14	8.02	9.67	1.50	0.95	162.27	270.51
World	2,211.96	3,136.29	100.00	100.00	532.66	1,016.89	100.00	100.00	240.81	324.23

Source: FAO, TY.

Table 9. Major Onion Importing Countries and Their Share  
(Quantity in <sup>0</sup>000 t and Value in million\$)

Country	Import Quantity				Import Value			
	% of Total Quantity				% of Total Value			
	1988	1994	1988	1994	1988	1994	1988	1994
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Germany	353.82	289.70	16.50	9.37	78.66	113.64	13.07	10.11
USA	185.32	244.61	8.64	7.91	83.99	157.75	13.96	14.03
UK	221.62	219.61	10.33	7.11	49.91	84.33	8.29	7.50
Japan	112.63	207.19	5.25	6.70	46.16	96.13	7.67	8.55
Saudi Arabia	124.99	179.08	5.83	5.79	20.42	33.65	3.39	2.99
Malaysia	109.54	162.58	5.11	5.26	32.21	60.68	5.35	5.40
U.A.E.	107.67	145.00	5.02	4.69	12.33	26.30	2.05	2.34
Brazil	0.00	137.46	0.00	4.45	0.00	29.80	0.00	2.65
Canada	89.92	117.03	4.19	3.79	31.49	43.06	5.23	3.83
France	141.92	95.39	6.62	3.09	31.61	39.22	5.25	3.49
Netherlands	47.90	89.85	2.23	2.91	11.69	31.53	1.94	2.81
Bangladesh	12.87	80.00	0.60	2.59	4.68	16.00	0.78	1.42
Singapore	59.38	72.88	2.77	2.36	19.65	24.56	3.27	2.18
Korea Rep	0.02	59.38	0.00	1.92	0.01	26.90	0.00	2.39
Spain	18.17	44.95	0.85	1.45	4.32	12.19	0.72	1.08
Mexico	5.41	43.50	0.25	1.41	0.61	12.65	0.10	1.12
Kuwait	36.49	35.25	1.70	1.14	8.64	9.97	1.44	0.89
World	2,145.01	3,090.59	100.00	100.00	601.77	1,124.17	100.00	100.00

Source: FAO, TY.

## VI. EXPORTS OF ONION FROM INDIA

The information on exports of onion from India is available for a period of 26 years (1960-61 to 1995-96). The total quantity, value and price realised are shown in Table 10 (see Chart 3-A and Chart 3-B). Although the quantity exported shows a rising trend, there are year-to-year fluctuations. Same is true with value and prices. The

average price realised from exports was Rs 6,573 per tonne in 1995-96. The average share of India's exports to its production (Chart 4) is 10 per cent. The export which was in the hands of private traders till 1966, was canalised through National Agricultural and Cooperative Federation of India, Ltd. (NAFED) in December 1975.

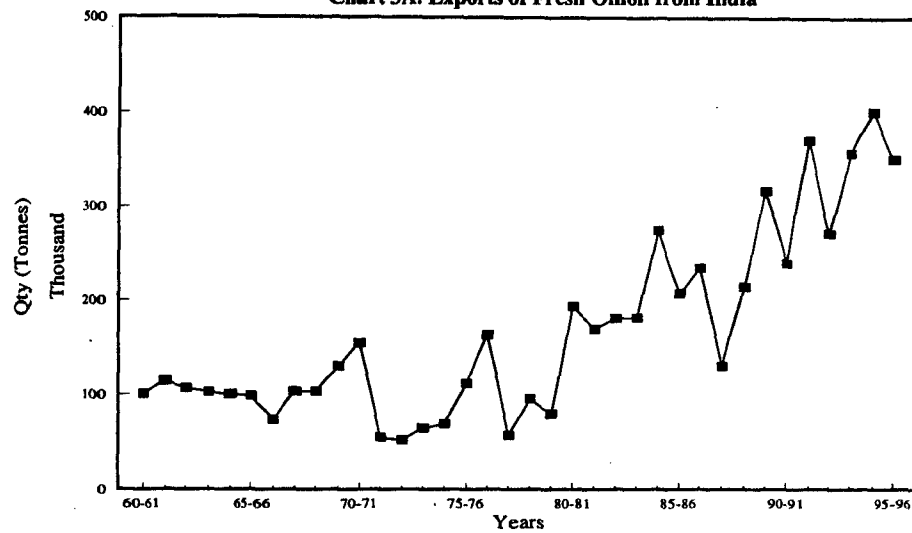
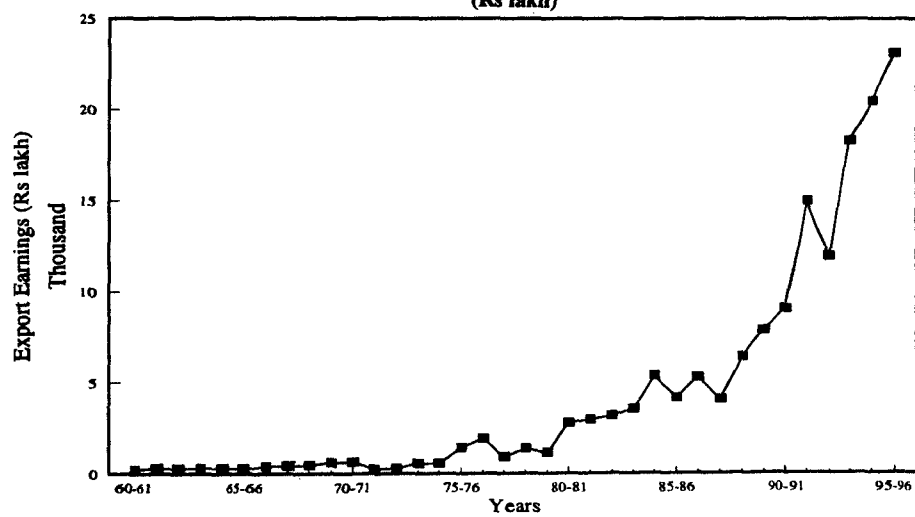
Table 10. Exports of Fresh Onions from India

Year (1)	Quantity (Tonnes) (2)	Value (Rs Lakh) (3)	Value Per Tonne (Rs) (4)
1960-61	99,945	212.72	212.84
1961-62	1,14,022	291.30	255.48
1962-63	1,06,653	264.50	248.00
1963-64	1,02,697	290.82	283.18
1964-65	1,00,297	300.52	299.63
1965-66	98,829	252.26	255.25
1966-67	73,190	384.33	525.11
1967-68	1,03,344	417.15	403.65
1968-69	1,03,094	457.30	443.58
1969-70	1,30,026	591.54	454.94
1970-71	1,54,625	620.63	401.38
1971-72	54,865	227.56	414.76
1972-73	51,763	267.47	516.72
1973-74	64,439	516.88	802.12
1974-75	68,983	534.33	774.58
1975-76	1,11,998	1,384.60	1,236.27
1976-77	163,533	1,885.12	1,152.75
1977-78	56,821	907.25	1,596.68
1978-79	95,541	1,364.74	1,428.43
1979-80	79,370	1,124.83	1,417.20
1980-81	1,93,658	2,767.68	1,429.16
1981-82	1,69,771	2,943.81	1,733.99
1982-83	1,81,313	3,165.99	1,746.15
1983-84	1,81,510	3,560.12	1,961.39
1984-85	2,74,803	5,368.71	1,953.66
1985-86	2,07,709	4,124.45	1,985.69
1986-87	2,34,726	5,275.26	2,247.41
1987-88	1,30,392	4,061.23	3,114.63
1988-89	2,14,238	6,417.31	2,995.41
1989-90	3,17,304	7,906.11	2,491.65
1990-91	2,40,222	9,088.26	3,783.28
1991-92	3,70,950	14,959.25	4,032.69
1992-93	2,71,689	11,935.57	4,393.10
1993-94	3,57,132	18,267.96	5,115.18
1994-95	4,01,281	20,461.94	5,099.15
1995-96	3,50,989	23,072.00	6,573.43

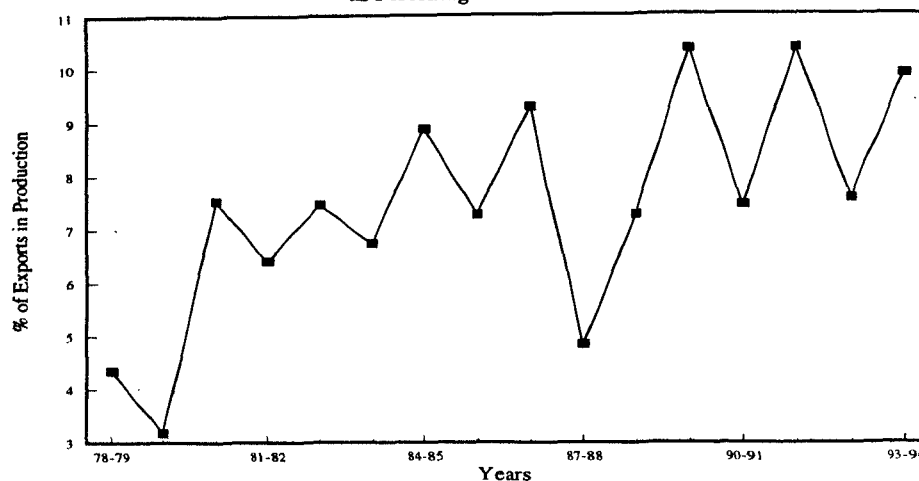
Source : GOI, *Monthly Statistics of the Foreign Trade of India* (MSFTI), Vol. I, Exports and Re-export, Annual Numbers, Relevant Issues.



Chart 3A. Exports of Fresh Onion from India

Chart 3B. Earnings from Exports of Onion from India  
(Rs lakh)

**Chart 4. India's Exports of Onion  
as Percentage of Total Production**

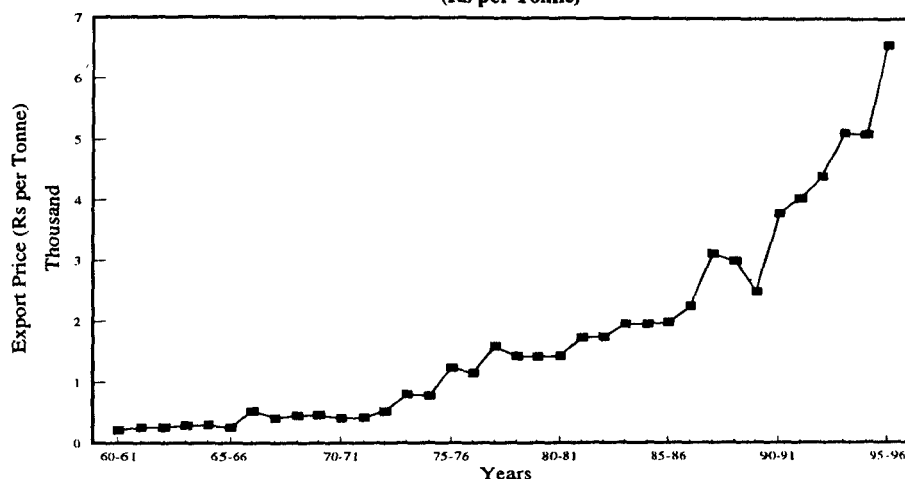


**Table 11. Countrywise India's Exports of Fresh Onions (Year 1995-96)**

Country (1)	Export Qty (Tonnes) (2)	Export Value (Rs Lakh) (3)	Export Value (Rs per Tonne) (4)	% of Total Qty (5)	% of Total Value (6)
U.A.E.	1,01,878.65	5,655.25	5,550.97	29.03	24.51
Malaysia	89,295.32	6,369.64	7,133.23	25.44	27.61
Sri Lanka	63,562.41	3,761.67	5,918.08	18.11	16.30
Singapore	41,585.05	4,229.45	10,170.61	11.85	18.33
Bangladesh	31,189.57	1,778.62	5,702.60	8.89	7.71
Saudi Arabia	8,389.00	376.21	4,484.59	2.39	1.63
Mauritius	6,074.00	351.59	5,788.43	1.73	1.52
Baharain I.S.	2,419.00	150.73	6,231.25	0.69	0.65
Kuwait	2,099.53	107.95	5,141.81	0.60	0.47
Maldives	995.60	87.11	8,749.88	0.28	0.38
Shechelles	474.00	30.96	6,531.22	0.14	0.13
Netherlands	396.00	21.12	5,334.34	0.11	0.09
Reunion	395.00	22.91	5,798.73	0.11	0.10
Nepal	282.86	11.05	3,906.88	0.08	0.05
U.K.	280.80	19.88	7,080.48	0.08	0.09
U.S.A.	280.80	19.88	7,080.48	0.08	0.09
Qatar	270.00	10.90	4,037.04	0.08	0.05
Indonesia	250.00	10.73	4,291.60	0.07	0.05
Germany	250.00	10.73	4,291.60	0.07	0.05
France	25.00	1.18	4,720.00	0.01	0.01
Australia	4.00	0.32	8,100.00	0.00	0.00
Canada	1.20	0.09	7,866.11	0.00	0.00
Japan	0.79	0.10	12,229.30	0.00	0.00
Other Countries	590.43	44.16	7,479.29	0.17	0.19
All Countries	3,50,989.00	23,072.25	6,573.50	100.00	100.00

Source : GOI, *MSFTI*, March 1995-96, Pp. 66-67.

Chart 5. Price Realised from Exports of Onion  
(Rs per Tonne)



In 1995-96, India exported fresh onions mainly to UAE, Malaysia, Sri Lanka, Singapore and Bangla Desh (Table 11). These five countries taken together accounted for 93 per cent of India's export in quantity and 95 per cent in value. Out of these countries, the price realised was highest for Singapore (Rs 10,171 per tonne) and lowest for Bangla Desh (Rs 5,703 per tonne). The exports to USA, European countries, Japan and Australia were negligible although the price realised from the exports to these countries is significantly high. The average price realised from export of onion (Chart 5) shows a rising trend with year-to-year fluctuations.

India also exports processed onions (preserved and dehydrated onions). The volume of this is as yet small, and its value (1995-96) is around Rs 65 crore (as compared to the value of exports of fresh onions at Rs 231 crore). The major importing countries are Singapore, Malaysia, Germany, Netherlands and UK (Table 12). Malaysia seems to be our major customer for both

fresh and processed onions.

Table 12. Exports of Onion and Onion Products from India during 1995-96

	Quantity ('000 Tonnes) (2)	Value (Rs Lakh) (3)	Major Countries (4)
(1)			
Fresh Onion	351.00	23,072.00	UAE, Malaysia, Sri Lanka, Bangladesh, Singapore
Preserved Onion	21.50	4,500.00	Singapore, Malaysia, Germany, Netherlands, UK
Preserved Onions (in Vinegar)	0.90	469.00	Germany, Netherlands, UK
Dehydrated Onions	4.10	1,565.00	Germany, Malaysia, Netherlands, UK
Total		29,606.00	

Source: GOI, *MSFTI*, March 1995-96, Pp. 71, 73, 180.

## VII. MARKETING OF ONION IN INDIA

After harvesting, onions are dried on the farm and sorted before they are transported to the assembling markets. The packaging is in 40 kg gunny bags; for exports, jute bags or wooden baskets are used. The onion is purchased in the assembling markets, stored and transported by traders and sold in the wholesale markets to the wholesalers. The retailers, who are generally vegetable traders, sell them to the ultimate consumers throughout the country. The grading is undertaken manually.

There are few co-operative societies, especially at major producing centres, which play a significant role in marketing. They include Nasik District Potato and Onion Growers Co-operative Association, Nasik Vegetable and Fruit Co-operative Marketing Society, Mahuva Taluka Co-operative Sales Purchase Union, Onifed (Gujarat) and Horticultural Producers' Co-operative Marketing and Processing Societies (Hopcoms) (Karnataka).

'Lasalgaon in Maharashtra is the biggest onion market in India. About 40 per cent of the total production of onion of Nasik district arrives in this market aggregating about 1,20,000 tonnes annually' [National Horticulture Board (NHB), *Horticulture Information Service (HIS)*, March 1995, p. 119].

Export is also a major outlet for Indian onions. 'The varieties exported from India are Pusa Red, Agrifound Light Red, N-2-4-1, Agrifound Dark Red, N-53 as also local Nasik Red and Bellary Red, in common big onions. Export is from Maharashtra, Gujarat, Andhra Pradesh, Karnataka and Tamil Nadu. In small onions, the varieties are Agrifound Rose and Bangalore Rose, grown in Karnataka, and Andhra Pradesh Podisu. Mutlore and Natu, the local multiplier types, as also CO-4, CO-3 and Agrifound Red, the improved varieties grown in Tamil Nadu, are also exported' [Pandey, 1993, p. 22].

## VIII. PRICES IN INDIA

Along with the All India Wholesale Price Index for all commodities (WPI), the wholesale price

index for onion is also published in India. It is a weekly index, and when averaged, provides us the data of monthly and annual price indices.

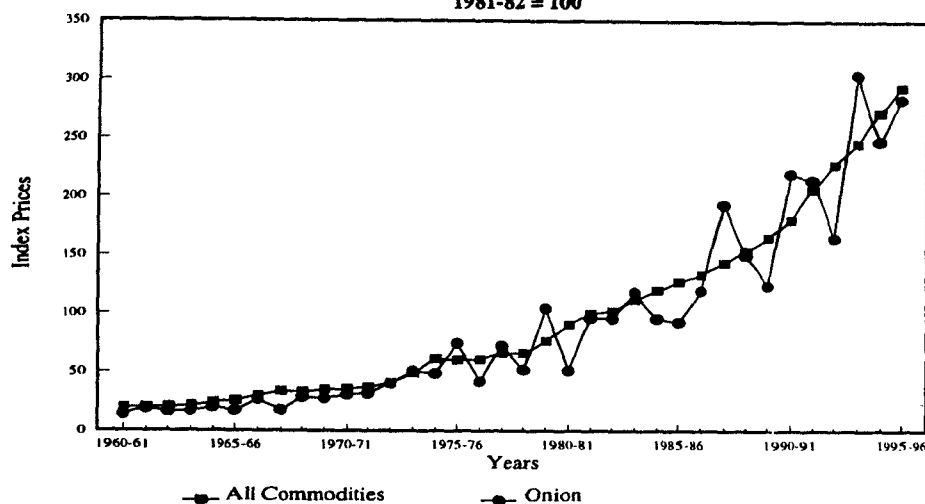
Table 13 and Chart 6 present the annual wholesale price indices for onions in India. As one can see, they show a rising trend, with year-to-year fluctuations around it. There is also a rising trend in the WPI, but the year-to-year fluctuations around it are less than those around the trend in onion prices.

Table 13. Annual Wholesale Price Indices  
(Base : 1981-82=100)

Years (1)	All Commodities (2)	Onion (3)
1960-61	19.48	13.95
1961-62	19.69	18.55
1962-63	20.02	16.02
1963-64	21.14	16.58
1964-65	23.82	19.44
1965-66	25.67	16.77
1966-67	29.65	26.37
1967-68	33.24	17.72
1968-69	32.86	28.37
1969-70	34.74	27.22
1970-71	35.46	30.54
1971-72	36.80	31.63
1972-73	40.30	40.24
1973-74	48.87	50.24
1974-75	61.16	48.81
1975-76	59.87	74.52
1976-77	60.34	41.92
1977-78	66.02	72.00
1978-79	65.87	51.76
1979-80	76.04	104.06
1980-81	90.32	51.29
1981-82	99.79	96.01
1982-83	102.08	95.84
1983-84	111.51	118.22
1984-85	119.63	95.48
1985-86	126.70	92.38
1986-87	133.39	119.48
1987-88	142.92	193.20
1988-89	153.60	149.64
1989-90	164.77	123.59
1990-91	180.28	219.92
1991-92	206.13	214.51
1992-93	227.40	164.92
1993-94	245.70	304.58
1994-95	272.40	247.67
1995-96	293.46	283.39

Source: GOI, WPI.

Chart 6. Annual Wholesale Price Indices of All Commodities and Onion  
1981-82 = 100



The data of annual prices of onion for 5 markets in India are available for 5 years (Table 14 and Chart 7). There are year-to-year changes; prices in 1993 are higher than those in 1992 and 1994. They again increase in 1995 to fall in 1996. By and large, the prices in Delhi seem to be ruling highest; they are followed by those in Bangalore, Mumbai, Pune and Nasik. This hierarchy in prices reflects the importance of the markets also. Delhi is a metro-market and so is Bangalore.

Mumbai is also a metro-market but it is served by the neighbouring producing regions of Maharashtra and Gujarat. Pune is a terminal market but located almost within the producing region. Nasik is, of-course, the assembling market receiving produce from farmers. One can also see that inspite of differences in prices and character of these markets, the annual prices move in the same direction in all these markets.

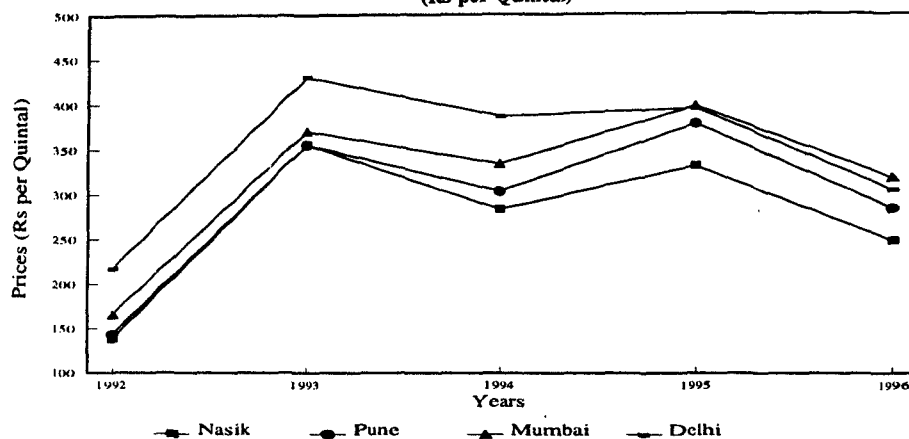
Table 14. Annual Average Prices of Onions at Major Markets

(Rs per Quintal)

Markets (1)	Years				
	1992 (2)	1993 (3)	1994 (4)	1995 (5)	1996 (6)
Nasik	138.08	355.25	283.17	331.25	247.63
Pune	143.17	354.83	302.83	377.92	284.13
Delhi	217.08	430.42	386.67	395.17	304.38
Bangalore	192.17	366.42	306.00	393.67	359.13
Mumbai	165.58	370.17	333.83	397.75	318.13

Source: NHB, HIS.

Chart 7. Annual Average Prices of Onion in Major Markets  
(Rs per Quintal)



#### IX. SEASONALITY IN PRICES

In order to examine the seasonality in prices, two sets of data are used. One of them is the series of monthly wholesale price indices for onion. These are compiled, as mentioned earlier, from the price information received from several centres, all over the country. Naturally, since onion is grown in different seasons in different parts of the country, the amplitude of its seasonality is likely to be lower than that in any local market. To examine the latter, data of monthly prices prevailing in the Pune market (Pune Agricultural Produce Market Committee) (PAPMC) was collected. The produce comes to this market from different parts of the country, but bulk of it comes from Maharashtra. Pune is, of course, a terminal and a large consuming centre. The seasonality in prices in Pune market is, therefore, also likely to be less than that of an assembling market located near a producing region. However, that should not lessen the importance of Pune market, for this market is also served by the major producing areas like Manchar and Junnar, which are located in the same district.

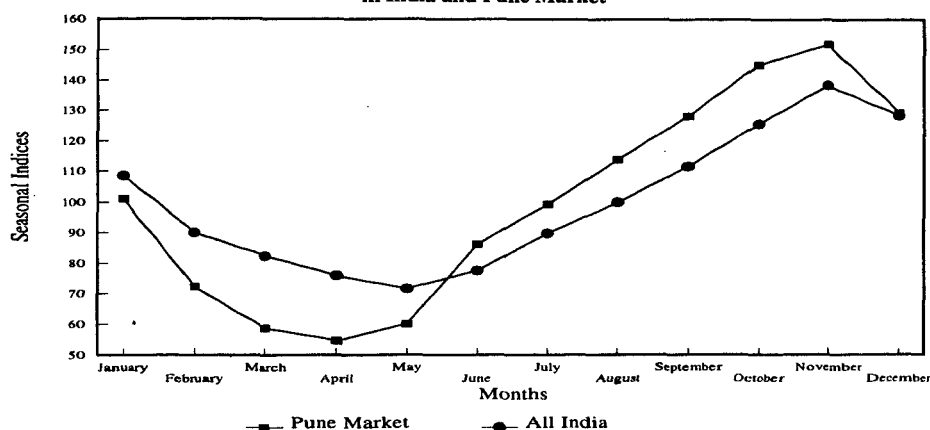
The seasonal indices of prices were calculated by the normal procedure of calculating the ratios of actual prices with their corresponding (13-month) moving averages and averaging these ratios for each month. The seasonal indices for these two series are presented in Table 15 and Chart 8.

Table 15. Seasonal Indices of Prices in India and Pune

Month (1)	Pune Market (2)	India (Index Price) (3)
January	100.96	108.54
February	72.14	89.99
March	58.75	82.40
April	54.56	75.91
May	59.91	71.67
June	86.22	77.67
July	99.34	89.72
August	113.84	99.84
September	128.14	111.63
October	145.06	125.54
November	151.80	138.31
December	129.20	128.35

Sources: PAPMC, Records; GOI, WPI.

Chart 8. Seasonal Indices of Prices  
in India and Pune Market



One can clearly see how sharp the seasonality is present in onion prices. In the series of wholesale price indices, the lowest prices prevail in May, when the seasonal price index touches 71.67. Then the prices start increasing, reaching their peak in November, when the index touches 138.31. After November, the prices again decline till May. The difference between the highest and the lowest indices is around 66 points, and the peak prices are higher by 93 per cent than the lowest prices.

As expected, the seasonality in Pune prices is more than that in wholesale price indices. Here, the lowest prices are in April, when the seasonal index is at 54.56. The prices then continuously increase to reach the high of 151.80 in November. The difference between the highest and the lowest indices is around 97 points, and the peak prices are higher by 178 per cent than the lowest prices.

If we consider the fact that the bulk (around 60 per cent) of the produce is *Rabi*, which is harvested in April-May, the troughs of prices in the months of April-May seem to be understandable. In Pune, there is also a late *Kharif* cultivation and the harvest starts in the month of February. This explains the trough in prices in the month of April.

The two series also highlight the extent of seasonality which, in the producing markets, should be even higher than these two sets of indices.

Pune market provided the data of monthly arrivals of onions. They were also examined for seasonality. The seasonal indices of arrivals (calculated in the same way as those of prices) are shown in Table 16 and Chart 9. Predictably, they are moving in opposite direction of prices. The peak arrival months are March and April and the lowest arrival months are September-October-November. The peak arrivals are higher than the low arrivals by 305 per cent.

Table 16. Seasonality in Arrivals in Pune

Month (1)	Arrivals (2)
January	100.05
February	124.18
March	185.50
April	148.51
May	132.41
June	112.87
July	90.11
August	56.39
September	45.85
October	65.60
November	66.10
December	72.38

Source: PAPMC, Records.

Chart 9. Seasonality in Prices and Arrivals  
in Pune Market

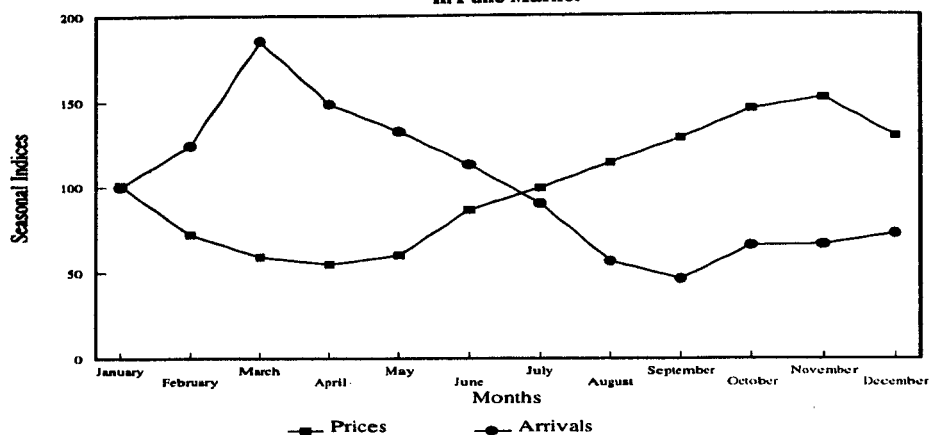


Table 17. Summary of Linear Regression Equation for Onion Prices in India  
(15 Years, 1978-79 To 1992-93)

Sr. No.	Dependent Variable		Independent Variables			Regression Equation	Variation Explained R <sup>2</sup>
	Y		X1	X2	X3		
(1)	(2)		(3)	(4)	(5)	(6)	(7)
1.	Wholesale Price Index	Trend				$Y=51.873+10.186 X1$ (.594)	0.96
2.	Area under Onion	Trend				$Y=219.143+6.857 X1$ (0.811)	0.85
3.	Production of Onion	Trend				$Y=2210.286+79.214 X1$ (12.575)	0.75
4.	Wholesale Price Onion	Trend				$Y=47.630+9.799 X1$ (1.809)	0.83
5.	Export Quantity	Trend				$Y=1033.97+134.354 X1$ (31.645)	0.58
6.	Export Price	Trend				$Y=801.610+205.732 X1$ (22.563)	0.87
7.	Seasonal Price Index Current Month	Seasonal Index Arrivals	Seasonal Index Arrivals	Seasonal Index Arrivals		$Y=181.559-.432 X1 -.383 X2$ (.141) (.141)	0.89
8.	Deviation of Area From Trend Current Year	Deflated Onion Price Previous Year	Deflated Onion Price-2 years Previous			$Y=-65.906+.414 X1+.274 X2$ (.124) (.122)	0.55
9.	Deviation of Export Quantity from Trend Current Year	Deflated Onion Price Current Year	Per Capita Onion Production Current Year			$Y=-1434.91-11.642 X1+676.852 X2$ (4.579) (388.162)	0.48
10.	Deflated Onion Price Current Year	Per Capita Onion Production Previous Year	Deviation of Export Quantity from Trend Previous Year	Deviation of Export Price from Trend Current Year		$Y=333.438-63.257 X1+0.019 X2+0.032 X3$ (15.548) (0.007) (0.01)	0.78

Notes: Figures in brackets refer to standard errors.  
Only significant Variables/Equations are included.  
For explanations of variables, see Table 18.



That the monthly prices are associated with monthly arrivals is vindicated by a regression analysis between the two. It is seen that the seasonal price index is associated significantly with arrivals in both current month as also in the previous month. Both these associations are negative, and the regression equation with these two as independent variables explains as much as 89 per cent of variation in the seasonal prices. Influence of these two factors is almost equal, although that of current month arrivals is slightly more than that of previous month arrivals (for details, see Table 17, Equation 7).

The seasonality in prices, in both the series, indicates that among all seasons, the *Rabi* crop influences the prices most. The all-India prices do not depress much when the crop in other seasons is harvested. This is partly attributed by the trade to the keeping quality of *Rabi* crop and the availability of a wider market to it.

This analysis also indicates the influence of local arrivals on prices. The cumulative way in which arrivals affect prices in Pune market, is due to the storage considerations of the traders.

Whether such association is also present in other smaller assembling markets or terminal markets should be researched in detail.

The above analysis, however, does justify storage on the part of farmers to lessen the peak load of arrivals and take advantage of the rise in prices in the off-season. The extent of seasonal fall and rise in prices is so high that it should warrant the on-farm storage. The promotion of this activity, after studying its economics, should attract the attention of policy makers.

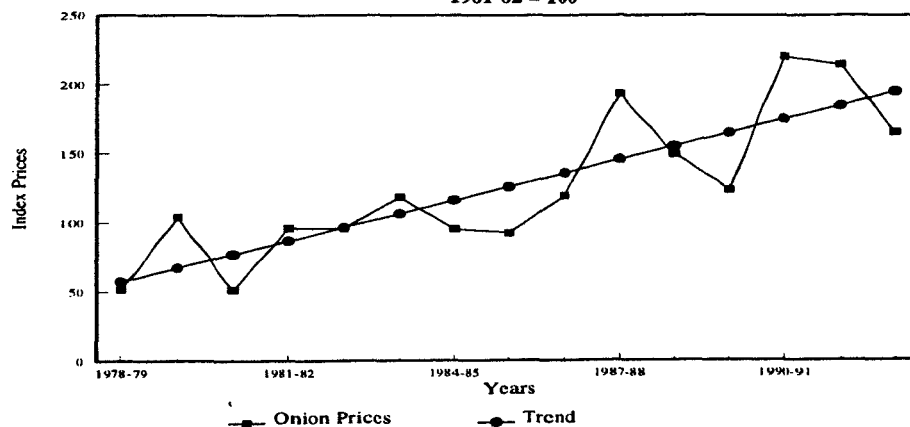
#### X. FACTORS INFLUENCING PRICES

There are several factors which are theoretically important in determining the onion prices in India. In this section, an attempt is made to identify, empirically, some of the most important ones and quantify their influence.

We have taken the annual all-India wholesale price index for onion as the variable which is to be explained, in statistical terminology, the dependent variable. The variables which explain the dependent variable are independent variables. Some of these independent variables themselves, are determined by other variables.

Chart 10. Wholesale Price Index of Onion

1981-82 = 100



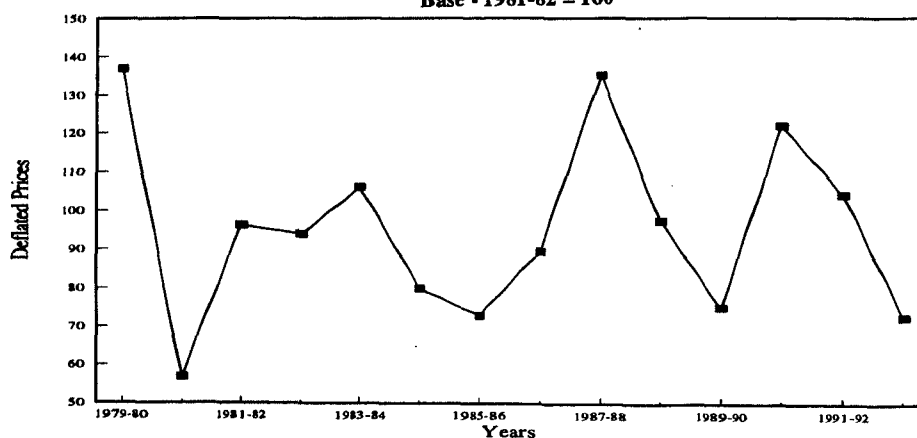
We have limited our analysis to the use of linear regression analysis. Since all the data concerning dependent and independent variables are available for 15 years, from 1978-79 to 1992-93, this period is used for the analysis. All the data that are used for this analysis is presented in the Annexure Table at the end.

Wholesale Price Indices for onion (henceforth called onion prices) reveal the presence of a rising trend (see Chart 10). A regression analysis indicates that the variable 'trend' itself explains around 83 per cent of variation in prices. Every

year, the price index seems to be increasing by 9.8 points. This could, logically, be due to the overall increasing prices. The Wholesale Price Index for all commodities (WPI) is also influenced by a rising trend, which explains 96 per cent variation in WPI, and which makes WPI to increase by around 10 points per year. In order to remove this influence, therefore, we 'deflate' the onion prices by dividing them by WPI. These deflated onion prices (see Chart 11), show no trend but wide fluctuations, bordering on cyclical nature. It is these prices we, henceforth, take as dependent variable.

Chart 11. Deflated Annual Prices of Onion

Base - 1981-82 = 100



The first factor that could be identified as an independent one is production of onion. It is, again, influenced by two factors : area and yield. Area shows an unmistakable increasing trend (Chart 1-A). The yield shows fluctuations but no increasing or decreasing trend (Chart 1-B). Because of increasing trend in area, production also shows an increasing trend (Chart 1-C). The 'Trend' factor explains variation in production less (75 per cent) than that in area (85 per cent). This is due to the fluctuations in yield which affect production. The increasing trend in production

(and area) should be due to the increasing demand, which again is partly due to the increasing population. Production when divided by population gives us the figures of per capita production. The per capita figures show absence of any trend, indicating that population is the only factor influencing demand. We, therefore, use per capita production (Chart 12) as one independent factor influencing onion prices. (Per capita availability - Production less exports - also moves in sympathy with per capita production, without exhibiting presence of any trend.)

Chart 12. Per Capita Production of Onion in India

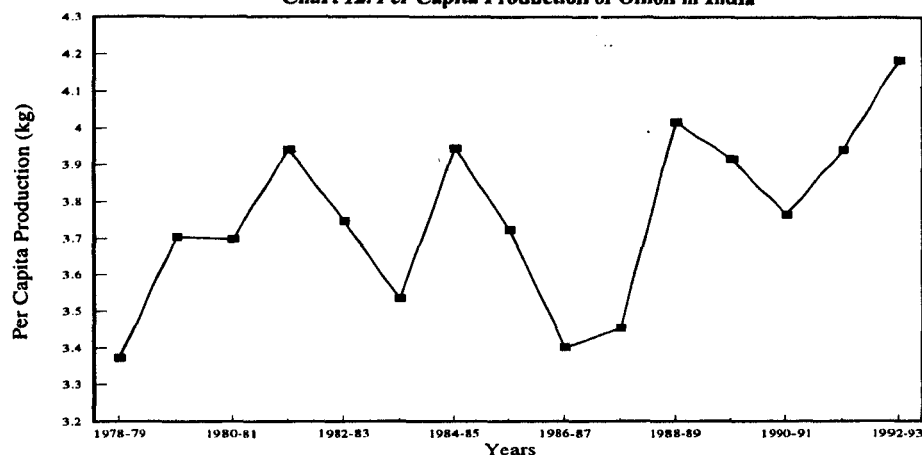
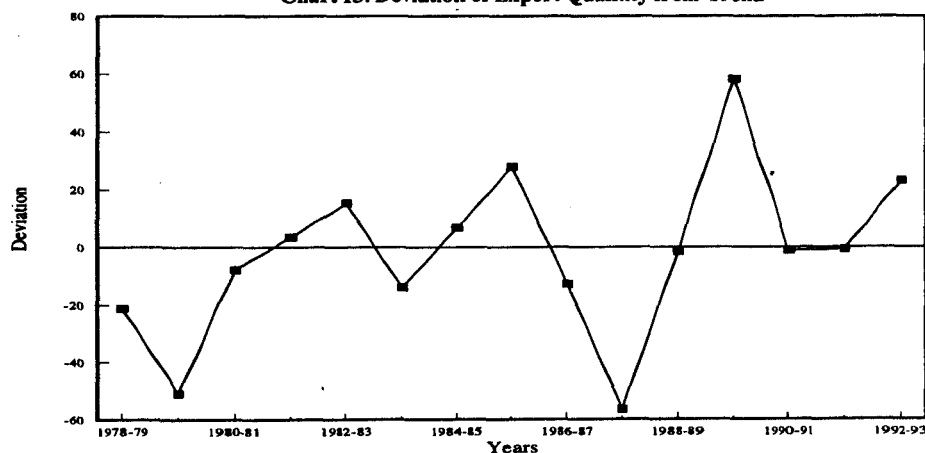


Chart 13. Deviation of Export Quantity from Trend



The quantity exported every year should logically be considered as the next candidate influencing onion prices, since it decreases availability of onion for local consumption. It also shows an increasing trend, which explains 58 per cent variation in export quantity. We have, therefore, removed this trend (using its trend regression equation) and taken 'deviation of export quantity from trend' (Chart 13) as the second independent variable.

The export price, or the price received free on board (FOB) from exporting onions, is the third variable that has been incorporated by us as independent variable. It also shows an increasing trend; the actual variable that has been used as independent variable is the 'deviation of export price from trend'. (Chart 14)

Per capita income (in constant 1980-81 prices) was taken as the fourth independent variable.

In addition to taking onion price as dependent variable, we also took 'export quantity (i.e., its deviation from trend)' and 'area under onion (i.e., its deviation from trend)' (Chart 15) as additional dependent variables. The same set of independent variables mentioned above were used for explaining variation in the dependent variables.

In other words, we postulated an onion price system in which Wholesale Price Index (for all commodities), yield, population, export price, trend and per capita income were exogenous variables; and onion price, area, and export

quantity were endogenous. It was further postulated that each of the endogenous variables was influenced by some exogenous and some endogenous variables. This influence, it was further hypothesised, could be with or without time-lag, lag being measured in terms of years. For the sake of simplicity, the influence was assumed to be linear. The problems of multicollinearity were resolved by taking the variables as deviations from their respective trend values and checking for the correlations among independent variables.<sup>1</sup>

Chart 14. Deviation of Export Price from Trend

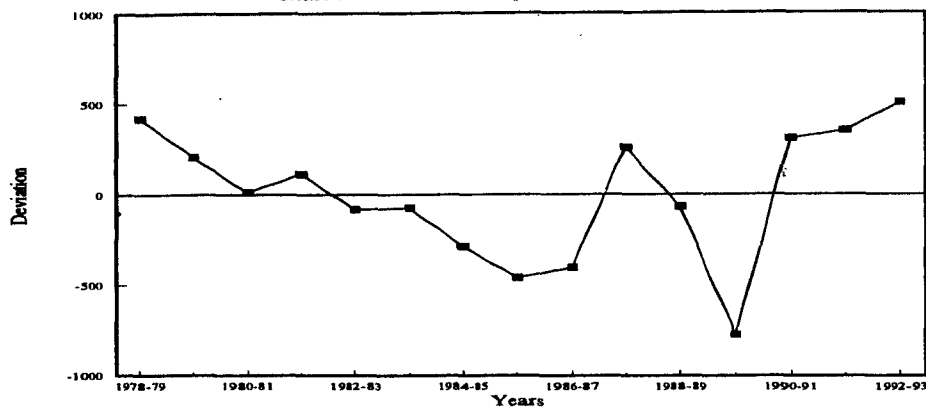
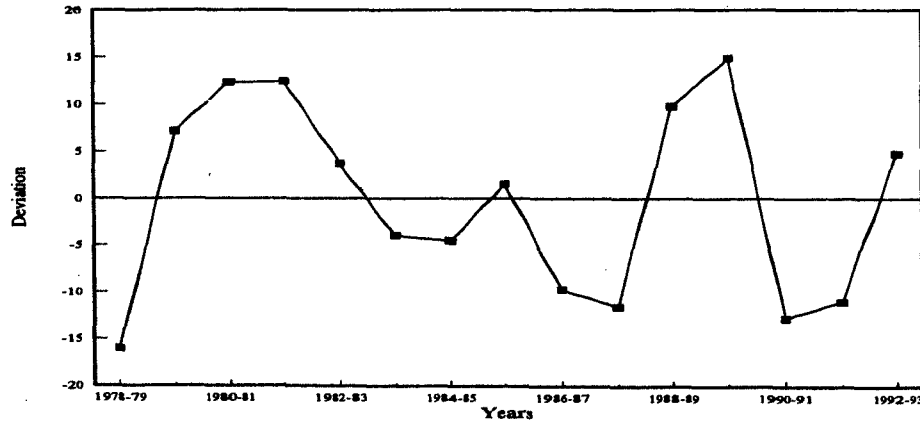


Chart 15. Deviation of Area under Onion from Trend



**Table 18. Variables Used in Regression Equation Models**  
(Period : 15 Years, 1978-79 to 1992-93)

Sr. No. (1)	Variable (2)	Explanation (3)
1.	Wholesale Price Index	Annual; Year: April-March; Base: 1981-82 used for deflating Wholesale Price Index of onion
2.	Area under Onion in India	In thousand hectares; Year: July-June
3.	Production of Onion	In thousand tonnes, Year: July-June
4.	Wholesale Price Index of Onion	Annual; Year: April-March; Base: 1981-82 used in regression equations representing onion prices after, whenever necessary, deflating by Wholesale Price Index
5.	Export Quantity (Quantity Exported)	In hundred tonnes; Year: April-March
6.	Export Price	Price realised in export, derived by dividing value of exports by quantity exported; Rs per tonne; Year: April-March
7.	Seasonal Price/Arrivals Index (Monthly)	Calculated from Monthly prices and arrivals data of Pune Agricultural Produce Market Committee (see also Table 15 and Table 16)
8.	Per Capita Production of Onion	Production divided by population (in kg)
9.	Per Capita Income	1980-81 prices (in Rs) (Source: <i>Economic Survey</i> , 1996-97)
10.	Trend	1 for 1978-79, 2 for 1979-80 etc. to 15 for 1992-93
11.	Deviations from Trend	Obtained by removing trend (using the Trend Equations) from the original variables; same units as original variables

After a series of calculations, the following conclusions emerged. (For results of regression analysis and explanation of variables, see Tables 17 and 18).

1. Area under onion is influenced by the following two factors (see Table 17, Equation 8):

- (a) Onion price in the preceding year (lag of one year), and
- (b) Onion price in the previous to preceding year (lag of two years).

These two factors taken together explain 55 per cent variation in area. Both the factors are significantly and positively associated with area.

Bulk of the sowing for *Rabi* takes place in the months of October-November. The *Kharif* and late *Kharif* sowing also takes place during May-June and August-September. It is, therefore, logical that the previous year's prices are

considered by the producers. It is, however, noteworthy that the prices prevailing two years ago also have a significant influence on area. In other words, the analysis indicates that producers have a somewhat wider perspective in making the decision concerning onion cultivation. That the farmers take economic factors into account and that they explain as much as 55 per cent variation, is really a heartening situation. The other factors, which are not considered here, could include technical variables like the needs of crop rotation, inter-cropping, etc., and the prices of the substitute crops. They are also important and probably account for the remaining unexplained variation.

2. Quantity exported is influenced by the following two factors (see Table 17, Equation 9):

- (a) (Domestic) onion price in current year, and
- (b) Per capita onion production in current year.

(a) Per capita onion production in the previous year (i.e., lag of one year),  
(b) Exported quantity in the previous year (i.e., lag of one year), and  
(c) Export price in the current year.

These three factors, taken together, explain 78 per cent of variation in the onion price. Per capita production is negatively associated while exported quantity and export price are positively associated with onion price. There is no influence of per capita income.

This model seems to be satisfactory, in terms of amount of variation explained and the logical presence of the associated factors, especially given the size of the Indian market, a large number of varieties grown and probable deficiencies in available data.<sup>2</sup>

Export Price

Export Quantity

Area

Per Capita Production

Deflated Price

Year 1 Year 2 Year 3 Year 4

Relationship with Price

Relationship with Area

Relationship with Export Quantity

Relationship between Area and Production (through Yield)

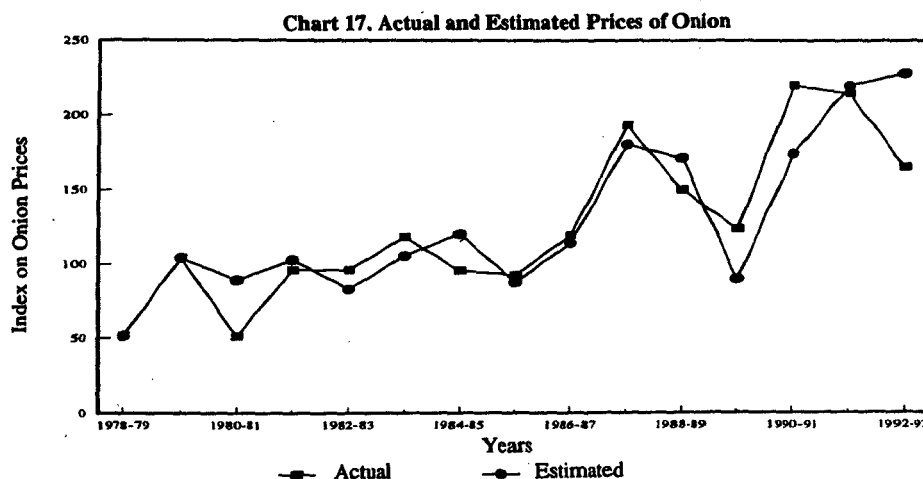
The equation incorporates both the supply factor (production) and demand factors (population, export quantity and export price). The lag of one year in production is understandable since the production of *Rabi*, which is marketed after February is available for domestic consumption and for export only in the next year. The current export price and the export performance of the previous year then become the chief 'international' influence.

It is also interesting to observe that even if the export price does not directly influence export quantity, it has an indirect impact on it through its influence on domestic price.

The onion price system is, thus, quite complicated but explainable. The lagged relationships are particularly interesting and probably they,

along with fluctuations in yields, account for the 4-year cycles in production and prices (see Chart 16).

If we compare the actual and estimated onion prices (Chart 17) by using the regression equations (Table 17) during the last thirteen years (the figures for the first two years remain the same, due to lagged relationship), we see that the onion price system, as described and empirically validated by us, seems to have a good deal of logic, consistency and applicability. This system is, of course, bounded by overall constancy in yield, fluctuations in yield and constancy in per capita production. If any of these parameters changes, the system is likely to experience a drastic change. There is no doubt that the parameters, like yield, need intervention. If the yields increase and/or are made less fluctuating, they may have an impact on the system by not only changing the coefficients but also the variables themselves.



#### XI. CONCLUSIONS

This study has some policy and research implications. They could be summarised as follows:

(i) The study reveals that prices are not influenced significantly by the changes in income. The per capita consumption of onion,

even if it is lower than many advanced countries, has also not increased. If this trend continues in future, and if the production increases, the export of onion could be the only way to arrest a large fall in prices. It is necessary, therefore, to expand and diversify our exports and seek markets for the processed onions as well. The exports, thus,

should become a long term objective for stabilising domestic prices.

(ii) In India, the yields of Onion are quite low as compared to international levels. Even within India, there are variations, with the regions like Gujarat, showing much larger yields than the rest of India. It would be better to concentrate on few major districts, increase the yield and encourage the varieties which are demanded in international market both as fresh products as well as processed ones. The varieties could also be so selected as to enable drying and storing them for a longer time. This could off-set the cyclical fluctuations arising out of year-to-year variations in yield. At present, onion production is concentrated in few major districts. This would be an advantage as it will enable these measures to be implemented in selected areas and yet obtain a large impact.

(iii) The construction of proper storage facilities at the village level and encouraging farmers to store their produce during peak season by offering them credit facilities are necessary to safeguard the interests of farmers from heavy seasonal fall in prices.

(iv) The producers seem to be making their decision concerning production on the basis of past prices. The monthly prices are also influenced by the current and previous arrivals.

The collection, dissemination and analysis of information on prices and arrivals of different grades and in different markets should, therefore, be undertaken by all the Agricultural Marketing Boards and the Agricultural Universities and Colleges on regular basis and should become an integral part of extension through farmers' meetings, training and visit programmes and TV and radio broadcasts.

(v) The relatively unimportant role played by factors, like per capita income and constancy of per capita production, raise some interesting issues. Does it mean that increased incomes are spent on vegetables other than onion? Is their a hierarchy in consumption of vegetables, with onion remaining at a lower level and some other vegetables (like tomato) at a higher level of preference? Has then the per capita consumption of the vegetables at the higher hierarchy been more responsive to changes in income? Or, has the per capita consumption of all vegetables been constant? It is necessary to examine these aspects. The present study indicates that even with aggregative data, it is possible to arrive at conclusions which advance our knowledge of price mechanism and factors influencing the commodity prices. Such studies should be pursued further and cover many other agricultural commodities.

Annexure Table

Year	Wholesale Price Index (Onion)	Wholesale Price Index (All Commodities)	Per capita Income (Rs)	Area ('000 ha)	Production ('000 t.)	Per capita production (kg)	Export Quantity ('00 t.)	Export Price (Rs per t.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1978-79	51.76	65.37	1,639	210	2,200	3.40	955	1,423
1979-80	104.06	78.04	1,550	240	2,500	3.77	794	1,417
1980-81	51.29	90.32	1,627	250	2,570	3.78	1,937	1,429
1981-82	96.01	88.78	1,680	250	2,650	3.82	1,698	1,733
1982-83	95.34	102.08	1,637	240	2,430	3.43	1,813	1,746
1983-84	118.22	111.51	1,800	270	2,700	3.73	1,815	1,961
1984-85	95.48	119.63	1,791	280	3,100	4.19	2,748	1,954
1985-86	92.38	126.7	1,836	280	2,860	3.79	2,077	1,986
1986-87	119.48	133.39	1,869	260	2,530	3.29	2,347	2,247
1987-88	193.2	142.92	1,903	270	2,700	3.43	1,304	3,115
1988-89	149.64	153.6	2,078	320	2,950	3.66	2,142	2,995
1989-90	123.59	164.77	2,142	300	3,070	3.73	3,173	2,492
1990-91	219.82	180.28	2,199	300	3,230	3.85	2,402	3,783
1991-92	214.51	206.13	2,175	320	3,580	4.18	3,710	4,033
1992-93	164.92	227.4	2,239	320	3,590	4.12	2,717	4,393



## NOTES

1. Multi-collinearity, that is the correlation among independent variables, could have been caused by the presence of linear trend in some of the variables. This has been avoided by taking these variables as deviations from their respective trends, wherever trend was a significant influence. All the independent variables included in the final set of multivariate regression analysis show no significant correlation coefficient among themselves. The exception is the correlation between the per capita production and the export quantity (measured as deviation from its trend). The correlation coefficient between them, which is + 0.562, is statistically significant at 5 per cent level. These two variables are included (with a lag of one year) in the price equation. Since this relationship is not affecting the significance of these two variables in the price equation, they are retained in the latter. None of the independent variables is significantly associated with the error terms of the equations in which they are included.

2. Among the three equations in the model, the price equation and the area equation are influenced by the variables which are pre-determined. The latter consist of the lagged variables as also the exogenous variables, like export price in the current year. Only the export quantity equation includes the price in the current year as an independent variable. This is a dependent variable in the price equation. In none of the equations specified by us, the export quantity in the current year is appearing as an independent variable. We have, therefore, taken these three equations as independent causal equations rather than simultaneously determined ones. This is also validated by the absence of any significant relationships among the three error terms of these equations. It should be, however, noted that this conclusion is not the last word on the subject. It is possible that in the real world, the two factors (price and export quantity) are simultaneously determined; this relationship could be brought out more clearly in the analysis of monthly/weekly data on domestic prices, arrivals, exports, export prices, stocks and government policy announcement. Some of this data (like all-India market

arrivals and stocks) are not available; the data on monthly exports and policy announcements are not readily available. An independent study to these aspects is contemplated.

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# IMPACT OF LIBERALISATION MEASURES ON INDIA'S COFFEE SECTOR: AN ECONOMIC ANALYSIS

M.R. Narayana\*

*This paper makes a descriptive analysis of the impact of liberalisation measures on India's coffee sector in terms of recent changes in production, consumption, marketing, pricing and exporting of coffee. As a background to this description, corresponding changes in world coffee are analysed. This analysis implies that the: (i) recent changes in India's coffee sector cannot be strictly and solely associated with the domestic liberalisation measures since the simultaneous global changes have been of much influence on the domestic coffee situation; (ii) growers and marketing agents have been reaping windfall profits which may not be conducive to long run production and production condition, especially when output prices start falling in the presence of downward inflexibility of factor prices; (iii) market prices have steeply gone up for domestic consumers, resulting in a loss of domestic consumption/demand; and (iv) complementary government policies, such as export tax policy and foreign exchange rate policy, in general, have been favourable for growers and exporters in the domestic coffee sector as well. These implications are useful for (a) understanding of the nature and direction of recent policy changes, and (b) formulating alternative future policy interventions in India's coffee sector.*

## I. INTRODUCTION

Liberalisation measures are the important components of the Structural Adjustment Policies under the on-going national economic reforms in India. An important area in which these measures have been introduced is the coffee sector.

This paper aims at a descriptive analysis of the impact of liberalisation measures, especially as they are related to the domestic marketing, pricing and exporting in India's coffee sector. As a background to this description, the recent changes in the world marketing, pricing and exporting of coffee are analysed. This impact analysis is of importance for the explanation and prediction of recent market behaviour and policy interventions in India's coffee sector.

The paper is organised as follows. Section II gives the data base for the study. In section III, liberalisation measures for the Indian economy in general and for the coffee sector in particular are detailed. Section IV summarises the recent changes in world coffee. In section V, the impact of the liberalisation measures is analysed. In

section VI, major implications of the impact analysis are highlighted. Section VII concludes the paper.

## II. DATA BASE

The data for this study are that available (in printed and/or published form) from secondary sources which include the World Bank, Coffee Board, Government of India and United Planters' Association of Southern India (UPASI). The World Bank's data are from the (i) *Commodity Markets and the Developing Countries*, a World Bank Quarterly published by the International Trade Division since 1993; and (ii) *Price Prospects for Major Primary Commodities* (Vol. II), since 1989. The Coffee Board's data are from the: (i) *Coffee Market Intelligence Reports* of the Market Intelligence Unit, since April, 1996; (ii) *Selected Statistical Statements for Database on Coffee, 1996*; (iii) statistical tables published with the Annual Reports; and (iv) the coffee statistics published in the monthly journal, *Indian Coffee*. The Government of India's data are from the *Foreign Trade Statistics of India* (Principal Commodities and Countries), published by the

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Director General of Commercial Intelligence and Statistics. Finally, data from UPASI are from its monthly journal, *The Planters' Chronicle*.

### III. LIBERALISATION MEASURES IN THE INDIAN ECONOMY:

The liberalisation measures in India's coffee sector are a part of the on-going trade reforms which, in turn, are an integral part of the Structural Adjustment Programme under the on-going national economic reforms since July, 1991. Thus, at first, an overview of the national economic reforms in India is presented below.<sup>1</sup>

#### III.1. National Economic Reforms in India: An Overview

It is well known that the Government of India had initiated the economic reforms in July 1991 for overcoming, over a period of time, several acute problems which had assumed menacing proportions by the end of 1990. These problems included: (a) rising current account deficit; (b) possibility of defaulting on international commitments with the prospect of denial of access to external credit markets/loss of creditworthiness; (c) falling rate of economic growth; (d) high inflationary pressures; (e) depletion of foreign currency reserves; (f) scarcities of essential commodities; and (g) breakdown of fiscal discipline, e.g., growing fiscal deficit.

A major objective of the reforms has been to attain rapid and sustained improvements in the quality of life of people in the country through: (i) rapid growth of income and productive employment; (ii) increasing consumers' gains from enhanced choices; and (iii) exposing producers to competition, both domestically and internationally.

For operational purposes, the reforms have been divided into two parts. First, the stabilisation part which aims, in the short run, at reducing the level of aggregate demand through two means: (i) reducing the current account deficit (called external stabilisation programme) and (ii) reducing the domestic rate of inflation containing the growth and size of fiscal deficit and, hence, reducing the high level of borrowing from the

Reserve Bank of India and its expansionary impact on money supply and, thereby, leading to low rates of inflation (called internal stabilisation programme). Secondly, the structural adjustment part which aims, in medium/long term, at increasing the level of supply/rate of growth of output through four measures: (i) export promotion (i.e., shifting resources from the import competing activities to export activities); (ii) globalisation (i.e., increasing the degree of openness of the economy); (iii) privatisation (i.e., shifting resources from government sector to private sector activities); and (iv) marketisation, i.e., changing the structure of incentives and institutions such that reliance on the market is increased or the role of state is reduced.

The major components of the reforms have been the (i) fiscal reforms, (ii) industrial reforms, (iii) trade and exchange rate reforms, (iv) reforms for attracting foreign investment, (v) financial sector reforms, and (vi) public sector reforms. In fact, all these components are interdependent and the measures under each of these different components are mutually complementary and supplementary for the overall sectoral and national economic growth. For instance, the policy measures under the fiscal reforms, trade and exchange rate reforms, and reforms for attracting foreign investment may be broadly related, directly or indirectly, to accomplishing the major objective of the external sector of the economy, viz., a reduction in the current account deficit.<sup>2</sup>

#### III.2. Liberalisation Measures in India's Coffee Sector

Upto 1993, coffee grown anywhere in India was the property of the Coffee Board, except where the Coffee Board exempted the pooling of coffee.<sup>3</sup> In addition, the entire internal (mainly, wholesale trade) and export trade of coffee was totally controlled by the Board.

The year 1993 had marked the beginning of the most important changes in the domestic marketing, exporting and pricing of coffee in India.<sup>4</sup> These were the introduction of Internal Sale Quota (ISQ) during 1993-94 and the Free Sale

Quota (FSQ) during 1994-95. These policy measures were aimed at the liberalisation of internal marketing, exporting and pricing of coffee from the institutional stronghold of the Coffee Board. In particular, the measures were aimed at giving greater freedom to the coffee growers in competitive marketing of their produce in the domestic and/or international markets, both directly and individually.

Under the ISQ (or FSQ) during 1993-94 (1994-95), all coffee growers were entitled to sell 30 per cent (50 per cent) of their production within (and/or outside) the country, either directly or indirectly, individually or co-operatively. The remaining 70 per cent (50 per cent) of the production had to be pooled with the Coffee Board.

On April 22, 1995, the FSQ was raised to 70 per cent for the large growers (i.e., growers with estate size of more than or equal to 10 hectares) and 100 per cent for small growers (i.e., growers with estate size of less than 10 hectares). This was to facilitate the small growers, especially the smallest of the small growers (i.e., growers with estate size of less than 4 hectares) to benefit from the liberalisation measures by totally exempting them from the obligatory pooling with the Coffee Board. Accordingly, the benefits of liberalisation measures were aimed to be discriminatory between large and small growers.

On September 22, 1996, the Union Commerce Ministry had announced that the FSQ would be extended to all growers, irrespective of their estate size. This announcement (i) fulfilled a long standing demand from the coffee growers for free (i.e., unrestricted) internal and export trade by themselves, and (ii) eliminated an earlier policy discrimination in the liberalisation between large and small growers.<sup>5</sup>

In essence, the liberalisation measures have introduced a greater competition, or reduced monopsony (in buying) and monopoly (in selling) powers of the Coffee Board, in the domestic and export marketing of coffee in India. Consequently, the market demand and consumption, supply and production, and domestic and export price of coffee in India have been influenced by the competitive conditions of supply, demand and prices in both the world and domestic markets, since 1993.

#### IV. RECENT CHANGES IN WORLD COFFEE

An important feature of the liberalisation measures is the integration of the domestic markets with the world markets of coffee. Thus, an understanding of the impact of liberalisation measures may not be complete without a background of the corresponding changes in world markets. In what follows, this background is given in terms of changes in world supply, demand, marketing, pricing and prices of coffee. Throughout, all discussion on pricing and prices will refer to spot pricing and spot prices.

##### *IV.1. Changes in World Supply and Demand of Coffee*

Coffee is a tropical commodity. Thus, it is mostly produced and exported by developing countries and consumed and imported by developed, industrial nations.

Table 1 summarises the total supply of and total demand for coffee in the world from 1990-91 to 1996-97. The total supply of coffee equals the sum of beginning stocks, annual production and annual imports. The total demand for coffee equals the sum of ending stocks, annual domestic use and annual exports. The total production of coffee comprises two important varieties, viz., Arabicas and Robusta. And, total exports of coffee include green coffee, roasted coffee and solubles.

Table 1. World Supply of and Demand for Coffee: 1991-92 to 1996-97

(in Million of 60 kg bags)

Year	Supply				Demand			
	Beginning Stocks	Production	Imports	Total Supply	Domestic Use	Exports	Ending Stocks	Total Demand
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1990-91	56.82 (37.93)	92.78 (61.93)	0.21 (0.14)	149.81 (100)	21.32 (14.23)	73.46 (49.04)	55.03 (36.73)	149.81 (100)
1991-92	55.03 (34.83)	102.64 (64.97)	0.31 (0.20)	157.98 (100)	22.14 (14.01)	81.79 (51.77)	54.05 (34.21)	157.98 (100)
1992-93	54.04 (37.05)	91.57 (62.79)	0.23 (0.16)	145.84 (100)	22.19 (15.22)	77.99 (53.48)	45.66 (31.31)	145.84 (100)
1993-94	45.66 (33.11)	91.93 (66.67)	0.30 (0.22)	137.89 (100)	23.21 (16.83)	74.46 (54.00)	40.22 (29.17)	137.89 (100)
1994-95	40.20 (30.01)	93.41 (69.73)	0.34 (0.25)	133.95 (100)	24.35 (18.18)	62.08 (46.35)	47.52 (35.48)	133.95 (100)
1995-96	36.77 (29.61)	86.77 (69.87)	0.65 (0.52)	124.19 (100)	23.43 (18.87)	71.59 (57.65)	29.17 (23.49)	124.19 (100)
1996-97	29.17 (22.63)	99.11 (76.88)	0.63 (0.49)	128.91 (100)	24.71 (19.17)	76.8 (59.58)	27.4 (21.26)	128.91 (100)

Notes: 1. International year of coffee is from October to September.

2. Figures for 1996-97 refer to forecast.

3. Figures in the parentheses are percentage to the total supply and demand.

Source: Statistical Division, Coffee Board, Bangalore.

Table 2. Share of India and Select Countries in World Supply of and Demand for Coffee: 1995-96 and 1996-97

(in Million of 60 kg bags)

Country	Production		Domestic Use		Exports		Total Demand/Supply	
	Total	Percent Share	Total	Percent Share	Total	Percent Share	Total	Percent Share
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
World								
1995-96	86.77	100.00	23.43	100.00	71.59	100.00	124.19	100.00
1996-97	99.11	100.00	24.71	100.00	76.80	100.00	128.91	100.00
India								
1995-96	3.49	4.02	1.04	4.44	2.48	3.46	3.89	3.13
1996-97	3.20	3.23	1.02	4.13	2.20	2.86	3.57	2.87
Indonesia								
1995-96	5.80	5.85	2.05	8.30	4.00	5.21	6.80	5.48
1996-97	6.50	6.56	2.14	8.66	4.20	5.47	7.26	5.85
Brazil								
1995-96	16.80	16.95	9.90	40.06	12.30	16.02	36.20	29.15
1996-97	27.50	27.75	11.00	44.52	16.50	21.48	41.50	33.42
Columbia								
1995-96	12.50	12.61	1.45	5.87	11.00	14.32	18.18	14.64
1996-97	13.00	13.12	1.50	6.07	12.00	15.63	18.73	15.08
Côte d'Ivoire								
1995-96	2.80	2.83	0.48	1.94	3.90	5.08	4.49	3.62
1996-97	3.20	3.23	0.51	2.06	3.65	4.75	3.73	3.00

Notes: 1. International year of coffee is October to September.

2. Figures for 1996-97 refer to forecast.

Source: Statistical Division, Coffee Board, Bangalore.

The total supply of and demand for coffee are observed to have been declining during 1991-92 to 1996-97. A major factor for the decline in total supply is attributable to the declining amount of beginning stocks, since total production and imports have almost remained stagnant over the years. The major factors for the declining total demand are attributable to the declining amount of ending stocks, since total exports and amount of domestic use exhibit no consistent trends over the years.

Table 2 summarises the share of select coffee producing countries, viz., India, Indonesia, Brazil, Columbia and Côte d'Ivoire or Ivory Coast, in total supply of or demand for coffee in the world during 1995-96 and 1996-97.<sup>6</sup> In addition, the share of these select countries in world production, domestic use and exports are separately presented. It is apparent that India's share in the world's supply or demand for coffee is about 4 per cent and Brazil's, 42 per cent, the former being the lowest and the latter the highest as compared with other countries in the table. In the same way, India's share is small in world production, domestic use and exports as compared with the share of Brazil, Colombia and Indonesia in world production, domestic use and exports. These data clearly imply that India can only be a small country (i.e., a price taker and not a price maker) in the world coffee market.

#### *IV.2. Changes in World Marketing and Pricing of Coffee*

From 1962 to mid 1989, the world marketing of coffee was governed by the quota system of the International Coffee Agreement (ICA) whose members include leading coffee producing and consuming nations.<sup>7</sup> In principle, the quota system was aimed at stable and remunerative price for producers and economical price for consumers of coffee in the world.

In early July 1989, the quota system of the ICA was suspended. According to the World Bank [1991, p. 26], this suspension of the quota system was due to disagreement among ICA members on

how to (i) allocate quotas among exporting countries by coffee types, and (ii) eliminate the large discounts given for exports to importing non-ICA countries. In particular, as the World Bank [1989, p. 11] had written long before, inflexibility and unclear method of distributing quotas among the exporting countries was the most important issue for discussion for the new, but now failed, ICA from October 1, 1989.

An immediate consequence of the suspension of the quota system mentioned above was the sharp decline in the price of coffee from US 253 cents per kg in May 1989 to US 134 US cents per kg in October 1989 in terms of the ICA Composite Indicator Price.<sup>8</sup> This decline in price was estimated to have caused a loss of export revenue of US \$4 billion for all coffee exporting countries in 1990.

The world market price of coffee began to rise in 1993. Low production in major exporting countries (especially, in Brazil due to frost) and the Stock Retention Scheme undertaken by the Association of Coffee Producing Countries (ACPC) were considered to be the major reasons for this price rise.<sup>9</sup>

It might be mentioned that serious efforts have been continued to revive the ICA since October 1994 for: (i) reducing the adverse impact on domestic market arising out of fluctuations in global market; (ii) ensuring effective demand-supply management through international co-operation alone, not by individual action; and (iii) eliminating the fear of loss to growers that the traders and exporters may switch over to other forms of trading and export of profitable products. Nevertheless, more recently, the World Bank [1993, p. 13] has stated several reasons for the unlikely start of the ICA in the near future. These reasons include the following. First, there is now a freer environment for coffee trading in many exporting countries because commodity board-type organisations have disappeared in several countries, including India and, hence, it would be difficult to control exports from these countries. Second, the allocation of quotas among the producing countries is likely to be difficult, given

the changes in exports that have taken place since the expiry of the last ICA. Third, the global trend towards a freer trade environment could make it more difficult to obtain co-operation from importing members, especially if the scheme aims to raise prices substantially or to deprive the consumers of choices among varieties of coffee. Thus, at least in the near future, the world prices of coffee would continue to be determined by the

free market factors.

#### IV.3. Changes in World Prices of Coffee

Table 3 presents the trends in actual (from 1980 to 1996) and projected (from 1997 to 2010) world market price of coffee by types. The trends in these actual world prices closely reflect the

Table 3. Annual Average Price of Coffee by Types in World Market: 1980 to 1996

Year	Price per kg in Current US \$		
	Robusta	Arabicas	(Robusta Price/ Arabica Price)*100
(1)	(2)	(3)	(4)
<i>Actual</i>			
1980	3.24	3.47	93.37
1981	2.27	2.82	80.50
1982	2.45	3.08	79.55
1983	2.74	2.9	94.48
1984	3.05	3.18	95.91
1985	2.65	3.23	82.04
1986	3.25	4.3	75.58
1987	2.26	2.51	90.04
1988	2.1	3.03	69.31
1989	1.66	2.4	69.17
1990	1.18	1.97	59.90
1991	1.07	1.87	57.22
1992	0.94	1.41	66.67
1993	1.16	1.56	74.36
1994	2.62	3.31	79.15
1995	2.77	3.33	83.18
1996	1.81	2.69	67.29
<i>Projections</i>			
1997	1.33	2.32	57.33
1998	1.46	2.14	68.22
2000	1.75	2.2	79.55
2005	1.93	2.4	80.42
2010	2.05	2.6	78.85

Sources: 1. The World Bank, 1993, p. 8.

2. *Commodity Markets and the Developing Countries*, A World Bank Quarterly, Various issues, International Trade Division, The World Bank, Washington.

consequences of major changes in the world marketing of coffee. Further, the rising annual prices from 1993 to 1995 are relevant for both types of coffee sold in the world market, viz., Robusta and Arabicas, although the prices of Arabicas have always been higher than those of Robusta. This is reflected in the ratio of Robusta prices to Arabicas' prices, which has remained at less than unity throughout the years. This is

mainly attributed to changing tastes in consuming countries from bitter caffeine-rich Robusta to Arabicas.

In addition, Table 3 shows that the world market prices of coffee for both Robusta and Arabicas have declined in 1996, but are projected to steadily increase from 1997 through 2010.

It should be emphasised that the annual price of coffee is only an average of weekly/monthly/quarterly prices for the concerned year. Thus, a rise or fall in the annual price does not mean a consistent increase throughout the reference

points within a year. This is clearly brought out in Table 4 where the quarterly average prices of coffee by types in the world market show wide fluctuations within a year, from 1993 to 1996.

Table 4. Quarterly Average Price of Coffee by Types in World Market : 1993 to 1996

Year (1)	Robusta				Arabicas			
	Jan-Mar (2)	Apr-Jun (3)	Jul-Aug (4)	Sep-Dec (5)	Jan-Mar (6)	Apr-Jun (7)	Jul-Aug (8)	Sep-Dec (9)
1993	144.1	123.4	157.7	133.9	147.5	134.2	168.7	173.8
1994	136.0	205.1	374.3	332.6	183.6	261.5	470.5	407.6
1995	303.0	304.6	268.2	232.5	383.5	367.4	318.4	263.6
1996	204.2	196.9	169.8	151.5	261.3	278.0	270.0	268.4

Source: Compiled from *Commodity Markets and the Developing Countries*, A World Bank Quarterly, various issues, International Trade Division, The World Bank, Washington.

In short, the major recent changes in world coffee are the following. First, the amounts of annual production and exports are the most important determinants of annual total supply of and demand for coffee, respectively, in the world. And, world production is mainly influenced by the production in Brazil and Colombia. Second, there exists no international commodity agreement for world marketing of coffee since October 1989, such as the ICA. Consequently, pricing is determined by competitive market conditions of supply of and demand for coffee in the world. Third, the world market prices exhibit fluctuations but are projected to increase from 1997 onwards.

#### V. IMPACT OF LIBERALISATION MEASURES ON INDIA'S COFFEE SECTOR

In what follows, the impact of liberalisation measures on India's coffee sector is captured in terms of recent changes within the coffee sector in (i) production and productivity; (ii) domestic consumption and export demand; (iii) marketing and pricing; and (iv) domestic prices of coffee since 1993 (i.e., post-liberalisation period). For the purpose of comparing the nature and magnitude of these changes with pre-liberalisation period, data on corresponding changes are presented for selected years before 1993 (i.e., pre-liberalisation period).

#### V.1. Impact on Domestic Production of Coffee

The annual total production and productivity of Indian coffee is given in Table 5 for selected years in the 1980s and 1990s.<sup>10</sup> It appears that corresponding to an increase in total area and plucked area in the country between 1980-81 and 1991-92, both the production and productivity of coffee have declined. Most importantly, this evidence is common for all the major coffee producing states, viz., Karnataka, Kerala and Tamil Nadu. Further, in all the years, the area under cultivation, total plucked area and total production in the country have been monopolised to the tune of over 90 per cent by the states of Karnataka, Kerala and Tamil Nadu. And, of these three states, Karnataka state dominates in regard to area under cultivation, plucked area, total production and productivity of coffee. Thus, increasing area under cultivation, decreasing production, distinct regional concentration and inter-regional disparities characterise the total production side of coffee in India before 1991-92. Since 1991-92, both production and productivity at the all India level as well as at the individual state level show marked fluctuations, as is evident from the data for 1995-96 and 1996-97.



Table 5. Total Production and Productivity of Coffee in India and in Selected States: 1980-81 to 1996-97

Year	All India					Karnataka					Kerala					Tamil Nadu					Share of Karnataka, Kerala and Tamil Nadu in all India Total (%). Figures in Brackets are for Karnataka				
	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne	Yield Per Hectare	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne	Yield Per Hectare	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne	Yield Per Hectare	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne	Yield Per Hectare	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne	Yield Per Hectare	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)						
1980-81	210.10	190.10	118.60	624.00	113.00	104.50	82.10	786.00	57.90	55.40	21.10	381.00	32.80	28.50	15.00	526.00	96.95	99.11	99.66						
1984-85	234.50	209.40	195.10	932.00	124.00	115.60	141.60	1,225.00	65.60	61.70	37.30	605.00	30.70	27.30	15.60	571.00	93.94	97.71	99.69						
1988-89	243.10	218.90	215.00	982.00	120.30	113.90	149.90	1,316.00	75.10	69.40	47.40	683.00	31.80	29.10	16.90	581.00	93.46	97.03	99.63						
1990-91	270.82	232.07	169.73	731.37	132.54	123.68	136.45	1,103.26	84.02	70.46	21.88	310.53	32.20	29.38	10.32	351.26	91.85	96.32	99.36						
1991-92	278.63	251.57	180.00	715.51	144.64	134.11	139.63	1,041.16	82.35	79.23	20.04	252.93	30.19	27.76	18.80	677.23	92.30	95.84	99.15						
1995-96	292.47	292.47	223.00	762.47	155.33	155.33	158.90	1,022.98	82.33	82.33	45.00	546.58	32.78	32.78	12.46	380.11	92.47	92.47	97.02						
1996-97	292.47	292.47	219.74	751.32	155.33	155.33	152.40	981.14	82.33	82.33	49.38	599.78	32.78	32.78	16.36	499.08	92.47	92.47	99.27						

Notes: 1. Productivity per hectare equals total production divided by total plucked area.

2. Total area is equivalent to total area planted, and plucked area is equivalent to bearing area (i.e., area which bears the fruits).

3. Figures for 1996-97 refer to blossom estimates.

4. The latest data on total area and plucked area of coffee is available for 1995-96. This data is used for 1996-97 also.

Sources: 1. Government of India, 1992, *Area and Production of Principal Crops in India: 1989-90*, Directorate of Economics and Statistics, Department of Agriculture and Co-operation, Ministry of Agriculture, New Delhi.

2. Statistical Division, Coffee Board, Bangalore.

Table 6. Production and Productivity of Coffee by Arabica Type in India and in Selected States: 1985-86 to 1996-97

Year	All India				Karnataka				Kerala				Tamil Nadu				Share of Karnataka, Kerala and Tamil Nadu in all India Total (%). Figures in Brackets are for Karnataka			
	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne	Yield Per Hectare	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne	Yield Per Hectare	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne	Yield Per Hectare	Total Area in '000 Hectare	Plucked Area in '000 Hectare	Production in '000 Tonne	Yield Per Hectare	Total Area	Plucked Area	Production	Yield Per Hectare
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(20)
1985-86	125.31	108.48	72.31	624.00	81.47	75.09	56.24	786.00	3.20	2.69	1.18	381.00	27.40	25.70	14.20	526.00	89.43	95.39	99.05	
1988-89	121.45	115.06	94.78	982.00	75.73	71.27	85.73	1,316.00	5.53	3.49	0.44	683.00	26.29	24.18	7.43	581.00	88.55	85.99	98.76	(77.78)
1990-91	127.93	107.25	78.31	730.16	76.84	71.58	69.35	968.85	4.72	3.31	0.51	154.08	26.58	24.37	7.55	309.81	84.53	92.55	98.85	(90.45)
1991-92	126.89	108.34	88.32	815.21	78.80	73.09	72.95	998.08	4.17	3.33	0.84	252.25	24.29	22.46	14.11	628.23	84.53	91.77	99.52	(88.56)
1995-96	143.49	143.49	103.25	719.56	91.88	91.88	86.60	942.53	4.17	4.17	1.90	455.64	27.27	27.27	13.2	484.05	85.94	85.94	98.50	(82.60)
1996-97	143.49	143.49	97.57	679.98	91.88	91.88	81.30	884.85	4.17	4.17	2.26	541.97	27.27	27.27	12.46	456.91	85.94	85.94	98.41	(83.87)
																	(64.03)	(64.03)	(83.33)	

Notes: 1. Productivity per hectare equals total production divided by total plucked area.

2. Total area is equivalent to total area planted, and plucked area is equivalent to bearing area.

3. The latest data on total area and plucked area of coffee is available for 1995-96. This data is used for 1996-97.

Sources: 1. Government of India, 1992, *Area and Production of Principal Crops in India: 1989-90*, Directorate of Economics and Statistics, Department of Agriculture and Co-operation, Ministry of Agriculture, New Delhi.

2. Statistical Division, Coffee Board, Bangalore.

Interestingly, the characteristics of production side of coffee in India may also be distinguished in terms of the varieties or types of coffee grown, viz., Arabicas and Robusta.<sup>11</sup> Table 6 gives the national and regional production and productivity for Arabicas for select years from 1985-86 to 1996-97. Since total production of coffee equals the sum of production of Arabicas and Robusta, subtracting the relevant figures in Table 6 from Table 5 gives figures for the production and productivity analysis for Robusta. Thus, no separate analysis for Robusta is attempted below.

Unlike the trends in total area and production in Table 5, the trends in the area and production of Arabicas is not consistent over the years either at the national level or at the regional level. However, the area and production of Arabicas as a percentage of total area and production under total coffee shows some interesting trends. First, both the total area and plucked area under Arabicas have declined, whereas the production has increased between 1988-89 to 1991-92. For instance, at the national level, total area under Arabicas has declined from 50 per cent in 1988-89 to 46 per cent in 1991-92. For the state of Karnataka, this decline is from 63 per cent to 55 per cent. On the other hand, total production of Arabicas have increased from 44 per cent in 1988-89 to 49 per cent in 1991-92. For the state of Tamil Nadu, this increase is from 44 per cent to 73 per cent. In regard to the regional concentration of production, Arabicas dominates the production of coffee in Karnataka and Tamil Nadu, whereas Robusta does the same in Kerala. Thus, wide regional diversities and annual variations characterised the production and productivity of coffee by types in India before 1991-92. And, since 1991-92, these diversities and variations seem to be more marked than before, as reflected in the data on production and productivity for 1995-96 and 1996-97.

It might be added here that commercial coffee crops are yielded after two years on Robusta and after 4 years on Arabicas, if planted from seedlings. These gestation periods are important in

order to assess the ultimate production response to prices in the coffee sector. Thus, the changes in production during the liberalisation period above should be of much relevance for Robusta only.

It is important to note that production of coffee in India is largely undertaken by small growers. This fact is presented in Table 7 in terms of size distribution of coffee estates (in hectare) for all India and for major coffee producing states in India. For the purpose of comparison, data are presented for 1991 and 1994. The data clearly show that the size distribution of coffee estates in different states as well as in the country as whole is highly skewed with large number of very small estates. In fact, the small growers constituted about 89 per cent of total coffee estates, in the country in 1994-95. This offers a plausible explanation for the favourable treatment for small growers in the initial liberalisation measures as explained in section III.2 above.

## *V.2. Impact on Demand for Coffee*

Demand for coffee in India is for domestic consumption and for exports. Before 1993, the pooled coffee by the Coffee Board was sold separately for internal consumption and for exports through a system of open auction. Thus, before 1993, the amount of total release of coffee to the internal and external markets by the Coffee Board could be treated as approximating the demand for domestic consumption and for exports, respectively.

### *V.2.1. Impact on Domestic Demand for Coffee*

Table 8 gives the domestic demand by varieties and per capita demand for all varieties of coffee from 1981-82 to 1992-93. First, of the three varieties, Arabica plantation and Robusta are the most consumed varieties of coffee in the country. Second, the annual total demand for coffee has

Table 7. Size Distribution of Coffee Estates in Selected States in India: 1991 to 1994

State/ All India	Number of Estates Below 4 Hectare			Number of Estates Between 4-10 Hectare			Number of Estates of 10 or More Hectare			Total Number of Estates in the State	
	Total	As a % of Nation's Total	As a % of State's Total	Total	As a % of Nation's Total	As a % of State's Total	Total	As a % of Nation's Total	As a % of State's Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Karnataka	1991	25,893	27.30	80.02	4,614.00	4.86	14.26	1,852.00	1.95	5.72	32,359
	1994	33,689	35.52	84.85	4,160.00	4.39	10.48	1,855.00	1.96	4.67	39,704
Kerala	1991	48,213	50.84	94.80	1,831.00	1.93	3.60	813.00	0.86	1.60	50,857
	1994	74,240	78.28	97.18	1,676.00	1.77	2.19	477.00	0.50	0.62	76,393
Tamil Nadu	1991	8,941	9.43	89.26	781.00	0.82	7.80	295.00	0.31	2.94	10,017
	1994	12,642	13.33	92.52	728.00	0.77	5.33	294.00	0.31	2.15	13,664
All India	1991	84,632	89.23	-	7,226.00	7.62	-	2,984.00	3.15	-	94,842
	1994	1,31,049	93.43	-	6,564.00	4.88	-	2,650.00	1.89	-	1,40,263

Sources: 1. Coffee Board 1994, 'Commodity Review on Coffee', Indian Coffee, Vol. LVIII, No. 10, Pp. 23-24.

2. Statistical Division, Coffee Board, Bangalore.

fluctuated considerably during the period. Thus, total demand has increased from 54 thousand tonne in 1981-82 to 63 thousand tonne in 1988-89, but has declined to 8.59 thousand tonne in 1992-93. Third, the demand for different varieties of coffee exhibits temporal inconsistency.

Moreover, domestic demand for all varieties has remained around 29 per cent of total production since 1988-89 and per capita consumption by all types of coffee has been considerably low during those years.

**Table 8. Total Domestic Demand by Types and Per Capita Demand for All Types of Coffee in India: 1981-82 to 1992-93**

Year	Total Release of Coffee from the Pool in the Internal Market ('000 tonne)				Per Capita Releases of Coffee by all Types - All India in kg
	Arabica Plantation or Other Mild Arabica	Arabica Cherry or Arabica	Robusta	Total	
(1)	(2)	(3)	(4)	(5)	(6)
1981-82	22.72 (42.04)	7.33 (13.56)	23.99 (44.39)	54.04 (100.00)	0.079
1985-86	25.94 (47.67)	6.4 (11.76)	22.08 (40.57)	54.42 (100.00)	0.071
1988-89	26.34 (41.59)	6.81 (10.75)	30.19 (47.66)	63.34 (100.00)	0.079
1990-91	21.69 (44.09)	6.97 (14.17)	20.54 (41.75)	49.2 (100.00)	0.059
1991-92	24.23 (46.11)	5.56 (10.58)	22.75 (43.30)	52.54 (100.00)	0.064
1992-93	3.24 (37.67)	0.90 (10.47)	4.46 (51.86)	8.59 (100.00)	0.010

Notes: 1. The figures for 1992-93 include the 30 per cent release of coffee under Internal Sale Quota.

2. Figures in the parentheses are the percentage to the total.

Source: Statistical Division, Coffee Board, Bangalore.

Since the advent of liberalisation measures in 1993, the release of coffee from the pool is affected and, hence, the domestic consumption data are neither published by the Coffee Board nor available from other sources. Thus, an analysis of the impact of liberalisation measures on domestic demand at the national level of aggregation or at the state level of disaggregation is not possible.

### *V.2.2. Impact on Export Demand for Coffee*

The impact on export demand is analysed below in terms of recent changes in annual and monthly exports, composition and direction of exports of coffee.

#### *V.2.2.1. Changes in Annual Exports of Coffee*

Total annual exports of coffee from 1981-82 to 1996-97 in both value and volume terms are given in Table 9. Total exported coffee include raw

coffee, roasted and ground coffee, coffee extracts and essence including substitutes, but raw coffee constitutes the largest share in total exports.

It is apparent that exports of coffee have consistently increased in terms of value over the years, that is, from Rs 14,629 lakh in 1981-82 to Rs 31,007 lakh in 1991-92 to Rs 150,294 lakh in 1995-96. In terms of volume, exports of coffee exhibit wide variations before 1992-93, but a consistent increase since then. This implies that the exports of coffee in terms of both value and volume have consistently increased since the start of liberalisation measures in the sector.

Next, exports of coffee as a percentage of total exports show annual variations. For instance, it had declined from 1.87 per cent in 1981-82 to 0.71 per cent in 1991-92 but has increased to 1.24 per cent in 1994-95 and to 1.41 per cent in 1995-96. Nevertheless, the annual exports of coffee have been remaining only a small part of India's total exports since 1981-82.

Table 9. Annual Exports of Coffee from India: 1980-81 to 1996-97

Year	Total Exports of All Commodities (Rs lakh)	Exports of Coffee (Rs lakh) = Value of Exports of Coffee	(3) as a % of (2)	Exports of Coffee (in '000 tonne) = Volume of Exports of Coffee	Annual Growth of Coffee Exports in Value Terms: %	Annual Growth of Coffee Exports in Volume Terms: %
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1980-81	6,71,100	21,400	3.19	87.3	N.A.	N.A.
1981-82	7,80,590	14,629	1.87	73.9	-31.64	-15.35
1982-83	8,80,300	18,711	2.13	76.7	27.90	3.79
1983-84	97,71,000	18,174	0.19	70.9	-2.87	-7.56
1984-85	11,74,368	21,022	1.79	67.5	15.67	-4.80
1985-86	10,89,500	27,297	2.51	96.2	29.85	42.52
1986-87	12,45,200	29,668	2.38	73.3	8.69	-23.80
1987-88	15,67,400	25,976	1.66	92.4	-12.44	26.06
1988-89	20,23,200	34,300	1.70	98.3	32.04	6.39
1990-91	32,52,728	25,238	0.78	85.9	-26.42	-12.61
1991-92	43,82,803	31,007	0.71	111.5	22.86	29.74
1992-93	53,68,826	37,625	0.70	114.1	21.34	2.38
1993-94	69,54,697	49,695	0.71	136.9	32.08	19.98
1994-95	82,33,801	1,01,887	1.24	137.4	105.02	0.37
1995-96	1,06,35,335	1,50,294	1.41	156.09	47.51	13.60
1996-97	1,17,52,498	1,46,892	1.25	164.42	-2.26	5.34

Notes: 1. All annual figures refer to exports during April to March.

2. Figures for 1996-97 are provisional.

3. Figure for total exports of all commodities for 1996-97 are from April 1996-February 1997.

Source: Compiled from *Foreign Trade Statistics of India* (Principal Commodities and Countries), various issues, Director General of Commercial Intelligence and Statistics, Ministry of Commerce, Government of India, New Delhi.

Further, the annual growth of exports in value and volume terms show no consistent trends, either before or after 1993. In fact, these annual growth rates show wide fluctuations throughout 1981-82 to 1996-97.<sup>12</sup>

#### V.2.2.2. Changes in Monthly Exports of Coffee

Table 10 presents the monthly (April-March) exports of coffee for all the financial years from 1990-91 to 1996-97. The export patterns reveal the phenomenal increase in the absolute value and volume of exports of coffee from the middle of 1993-94. In summary form, this is evident from the magnitude of mean values of exports from 1993-94 onwards which have been higher than for the years before 1993-94. However, since 1993-94, the monthly exports have been highly dispersing (as shown by the changing values of the range) and increasingly more varying (as shown by the increasing values of the standard deviation).

Two points deserve special mention here. First, the monthly (annual) export data in Table 10 (Table 9) refer to the provisional (or final, except for 1996-97) data. The provisional/current data are based on individual exporter's declaration in shipment bills, as checked and cleared by the sea port, airport and land customs authorities. And, final data refer to the actual exports during the month/year. Thus, the sum of monthly export data from April to March does not correspond to the annual, final, financial year export data in Table 9. Second, the main exporting season for Arabicas in India is December-March and for Robusta, January-April. Accordingly, a large quantity of coffee should have been exported during the months of December-April. However, the monthly export data in Table 10 do not strictly conform to the seasonal export pattern. Rather, the data show that the pattern of monthly exports is widely distributed during all the months,

Table 10. Monthly Exports of Coffee from India: 1990-91 to 1996-97

Month	1990-91		1991-92		1992-93		1993-94		1994-95		1995-96		1996-97	
	Quantity ('000 tonne)	Value (Rs lakh)	Quantity ('000 tonne)	Value (Rs lakh)	Quantity ('000 tonne)	Value (Rs lakh)	Quantity ('000 tonne)	Value (Rs lakh)	Quantity ('000 tonne)	Value (Rs lakh)	Quantity ('000 tonne)	Value (Rs lakh)	Quantity ('000 tonne)	Value (Rs lakh)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
April	8.82	2,019.17	3.20	1,015.14	6.07	2,032.76	3.80	1,769.89	13.52	7,120.52	6.86	7,127.28	17.88	14,135.35
May	9.39	2,915.42	3.66	1,156.24	6.82	2,363.28	2.52	981.05	16.61	8,868.86	6.75	7,212.40	23.44	19,471.70
June	3.29	1,256.63	9.65	3,443.71	6.25	2,580.68	5.52	2,351.13	14.16	8,149.60	9.01	10,486.86	22.84	18,764.96
July	8.23	2,555.73	4.63	1,584.57	6.97	2,369.89	9.53	4,637.13	16.30	11,609.65	16.90	17,355.94	22.02	20,486.73
August	8.01	2,416.57	5.97	2,219.42	7.36	2,619.49	5.13	1,892.35	12.30	10,139.26	12.42	13,029.76	15.04	11,371.97
September	4.28	1,081.91	9.45	3,094.78	13.80	4,568.24	8.99	4,146.23	13.92	12,882.28	15.81	10,218.75	15.79	11,780.95
October	4.95	1,823.68	4.48	1,602.91	8.55	2,716.92	10.58	4,855.91	6.74	8,004.89	15.27	13,782.24	5.10	4,835.98
November	5.37	1,486.05	6.56	2,424.33	21.76	4,001.08	7.18	3,591.79	7.57	8,620.58	14.25	13,801.79	5.36	5,048.11
December	8.01	2,132.97	13.94	4,573.79	9.75	3,646.69	15.71	7,419.63	6.96	7,360.62	14.82	14,240.25	4.52	5,361.61
January	11.68	3,317.08	18.66	6,356.08	10.30	4,019.90	12.32	5,819.72	4.67	4,508.65	8.35	6,720.65	4.83	5,509.90
February	6.48	1,680.99	6.36	1,936.93	8.31	2,935.68	9.93	4,992.29	6.15	6,940.62	12.84	11,133.32	10.26	11,522.82
March	7.20	2,550.86	8.28	2,405.59	5.84	2,383.18	13.97	7,251.98	9.12	10,728.84	19.91	17,395.82	17.35	18,601.66
Total	85.71	25,237.06	94.84	31,813.49	111.78	36,237.79	105.18	49,709.10	128.02	1,04,934.37	153.19	1,42,505.06	164.43	1,46,891.74

## Descriptive Statistics

Mean	7.14	2,103.09	7.90	2,651.12	9.32	3,019.82	8.76	4,142.43	10.67	8,744.53	12.77	11,875.42	13.70	12,240.98
Range	8.39	2,235.17	15.46	5,340.94	15.69	2,535.48	13.19	6,438.58	11.94	8,373.63	13.16	10,635.29	18.92	15,650.75
Standard Deviation	2.28	648.17	4.36	1,477.72	4.33	787.33	3.91	2,018.60	4.06	2,196.47	4.03	3,545.73	7.31	5,748.01

Note: All figures are provisional.

Source: Compiled from *Foreign Trade Statistics of India* (Principal Commodities and Countries), various issues Director General of Commercial Intelligence and Statistics, Ministry of Commerce, Government of India, New Delhi.

whether or not the month (or months) is (or are) in the export season. This is plausible since coffee can be stocked and released throughout the year, depending upon the marketing situation.

#### *V.2.2.3. Changes in Composition of Coffee Exports*

Coffee exports from India comprise the major varieties of Arabicas and Robusta. These varieties can be distinguished by their major grades. For instance, the major grades of Arabicas are Arabica Plantation and Arabica Cherry. For Robusta, the major grades are Robusta Parchment and Robusta Cherry. And, these major grades can be further distinguished in terms of several sub-grades of coffee. For instance, Arabica Plantation includes Plantation A; Plantation PB; Plantation B; Plantation C; and Plantation Bulk. In the same way, Robusta Parchment (Rob. Pmt) include Rob. Pmt. AB; Rob. Pmt. PB; Rob. Pmt. C; Rob. Pmt. BBB; and Rob. Pmt. Bulk.

Table 11 presents the composition of India's coffee exports by major varieties and by their main grades from 1991-92 to 1995-96. Of the total coffee exported, the composition of Robusta has been the largest over the years. And, of the main grades, Robusta Cherry and Arabica Plantation contributes the largest share. However, the relative share of the two major varieties has steadily declined from about 96 per cent in 1991-92 to about 86 per cent in 1995-96. This decline signifies the increasing role of other components of total coffee exports, viz., instant coffee, roasted seeds and grounded coffee.

#### *V.2.2.4. Changes in Direction of Coffee Exports*

As India is hardly an importer of coffee, the direction of trade is limited to the analysis of changing major export destinations for Indian coffee. Thus, in Table 12, the list of 12 major destination-countries for India's coffee exports is given from 1992-93 to 1996-97. These 12 countries accounted for 74 per cent (or 81 per cent) of total coffee exports in 1992-93 (or 1996-97). And, of these 12 countries, Germany, Italy, Russia, USA, Japan and Poland are the most important

destinations for the Indian coffee exports throughout the reference period. These six countries account for about 70 per cent to 90 per cent of total coffee exports from India to the 12 countries. Thus, no significant changes in India's export destinations for coffee are observed in recent years.

#### *V.3. Impact on Domestic Marketing and Pricing of Coffee*

Before 1993, the domestic coffee marketing in India was characterised by a single buyer or monopsonist, viz., the Coffee Board which was pooling entire coffee in the country. Further, the Board was vested with monopoly powers in allocating the coffee between domestic consumption and exports. Thus, the underlying market structure before 1993 was a combination of non-competitive market structures, viz., monopsony and monopoly.

Consequent upon (a) the introduction of liberalisation measures, and (b) changes in world market conditions under the collapse of the ICA, the market structure has changed from the above mentioned non-competitive structures to a competitive market structure, where the price is determined by the market conditions of supply and demand in the world as well as in the domestic markets. Thus, the changed domestic market structure and competitive pricing are important impacts of liberalisation measures on India's coffee sector.

#### *V.4. Impact on Domestic Prices of Coffee*

In the absence of future trading/marketing, all domestic prices of coffee in India refer to spot/cash prices. However, these spot prices are generated by different processes before and after 1993, and they are different for different grades. For instance, before 1993, domestic and export prices of coffee were determined by a process of open-auctioning of the pooled coffee by the Coffee Board. Since 1993, private auctions have come into being, especially the Indian Coffee Traders' Auctions (ICTA) at different trading centres including Bangalore. Further, there exists



Table 11. Composition of India's Coffee Exports: 1991-92 to 1995-96

Composition of Coffee Exported	1991-92			1992-93			1993-94			1994-95			1995-96		
	Total Exports (Rs lakh)	Per Cent to Total Exported	(2)	Total Exports (Rs lakh)	Per Cent to Total Exported	(3)	Total Exports (Rs lakh)	Per Cent to Total Exported	(4)	Total Exports (Rs lakh)	Per Cent to Total Exported	(5)	Total Exports (Rs lakh)	Per Cent to Total Exported	(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)					
1. Arabicas															
1.1. Arabica Plantation	33.28	29.86	40.77	35.89	43.54	31.90	41.09	29.91	45.12	27.20					
1.2. Arabica Cherry	10.98	9.85	9.94	8.75	9.02	6.61	13.91	10.12	9.58	5.77					
2. Robusta															
2.1. Robusta Parchment	8.15	7.31	12.53	11.03	15.12	11.08	8.96	6.52	11.27	6.79					
2.2. Robusta Cherry	54.22	48.65	35.39	31.15	49.31	36.12	54.49	39.66	76.29	45.99					
Total of 1+2	106.63	95.68	98.63	86.81	116.99	85.71	118.45	86.21	142.26	85.76					
Total Quantity Exported	111.45	100.00	113.61	100.00	136.50	100.00	137.40	100.00	165.89	100.00					

Source: Statistical Division, Coffee Board, Bangalore.

Table 12. Major Destinations of India's Coffee Exports: 1992-93 to 1996-97

Destination Country	1992-93				1993-94				1994-95				1995-96				1996-97			
	Total Exports	Per Cent to Total Quantity Exported	Per Cent to Total Quantity Exported	Per Cent to all Countries	Total Exports	Per Cent to Total Quantity Exported	Per Cent to Total Quantity Exported	Per Cent to all Countries	Total Exports	Per Cent to Total Quantity Exported	Per Cent to Total Quantity Exported	Per Cent to all Countries	Total Exports	Per Cent to Total Quantity Exported	Per Cent to Total Quantity Exported	Per Cent to all Countries	Total Exports	Per Cent to Total Quantity Exported	Per Cent to Total Quantity Exported	Per Cent to all Countries
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Australia	1,075	1.28	0.95	1,712	1.80	1.25	2,206	2.07	1.61	2,766	2.09	1.67	233	0.95	0.77					
Belgium	554	0.66	0.49	1,660	1.75	1.21	1,980	1.86	1.44	3,555	2.69	2.14	682	2.79	2.26					
Canada	398	0.47	0.35	3,669	3.87	2.68	1,324	1.24	0.96	2,840	2.15	1.71	340	1.39	1.12					
Dubai	1,095	1.30	0.96	1,339	1.41	0.98	865	0.81	0.63	1,539	1.16	0.93	222	0.91	0.73					
Germany	17,886	21.25	15.74	31,353	33.04	22.94	27,593	25.87	20.08	14,200	10.73	8.56	4,248	17.38	14.05					
Greece	873	1.04	0.77	1,594	1.68	1.17	1,367	1.28	0.99	3,150	2.38	1.90	684	2.80	2.26					
Italy	16,067	19.09	14.14	17,186	18.11	12.57	24,348	22.82	17.72	24,465	18.48	14.75	4,543	18.58	15.03					
Japan	5,572	6.62	4.90	4,835	5.10	3.54	6,687	6.27	4.87	10,025	7.57	6.04	1,096	4.48	3.63					
Jordan	689	0.82	0.61	897	0.95	0.66	2,690	2.52	1.96	2,510	1.90	1.51	304	1.24	1.01					
Poland	6,144	7.30	5.41	3,492	3.68	2.55	5,115	4.79	3.72	10,514	7.94	6.34	1,440	5.89	4.76					
Russia	26,585	31.58	23.40	16,010	16.87	11.71	18,759	17.59	13.65	40,056	30.25	24.15	7,630	31.21	25.24					
USA	7,237	8.60	6.37	11,135	11.74	8.15	13,740	12.88	10.00	16,777	12.67	10.11	3,024	12.37	10.00					
Total Exports to 12 countries	84,175	100.00	74.10	94,882	100.00	69.41	1,06,674	100.00	77.64	1,32,397	100.00	79.81	24,446	100.00	80.86					
Total Exports to all Countries	1,13,600	-	100.00	1,36,690	-	100.00	1,37,395	-	100.00	1,65,889	-	100.00	30,233	-	100.00					

1. All data refer to financial year (i.e., April-March).

2. Data for 1996-97 are from April-June, 1996.

Source: Statistical Division, Coffee Board, Bangalore.

different prices for different grades of coffee. For instance, farm gate prices are for raw coffee (unhulled and ungraded); ICTA auction prices are for major grades of clean coffee; wholesale prices are for clean coffee seeds of main varieties; and retail prices are for coffee powder.

The nature of average price movements from

1990 to 1993 under the Coffee Board's Pool Sales and from 1993 to 1997 under the Indian Coffee Trader Association's auction sales are given in Table 13. In particular, the data confirms the upward movement of these prices of coffee, especially since 1993-94, as an indicator of the impact of integration of domestic market with the world market for coffee.

Table 13. Annual Average Domestic Price of Coffee by Types in India: 1990 to 1997

Year/Month (1)	Average Price (Rs per kg)		
	Arabica Plantation 'A' or Other Mild Arabica (2)	Arabica Cherry 'AB' or Arabica (3)	Robusta Cherry 'AB' or Robusta (4)
Jan.-Dec. 1990	35.77	28.39	29.31
Jan.-Dec. 1991	38.53	31.90	29.35
Jan.-Dec. 1992	33.97	30.91	28.17
Jan.-Dec. 1993	43.71	36.13	33.18
Jan.-Dec. 1994	112.76	106.42	91.58
Jan.-Dec. 1995	100.48	87.05	84.19
Jan.-Dec. 1996	83.7	76.36	63.86
Jan.-May 1997	118.14	96.61	59.94

Notes: 1. The price in the table refers to the price of the main grades of coffee. Main grades constitute about 80 per cent of total sales.

2. Data upto 1993 refer to pool sales.

3. Data from 1994 refer to auction prices of the Indian Coffee Traders Association (Bangalore), except for April, 1996 which refer to ICTA (Average) auction price.

4. The price for Jan.-May 1997 refers to the average monthly ICTA auction price of January and May, 1997.

Source: Computed from the basic data on the average price for 50 kg bags under Pool Sales and auction sales provided by the Statistical Division, Coffee Board, Bangalore.

In the same way, the rise in wholesale and retail price of coffee powder is also evident in the recent past. For instance, Table 14 shows the annual movements of wholesale price of coffee seeds in Bangalore from 1990 to 1996. The steep rise in these wholesale prices is apparent since 1993. On

the other hand, Table 15 shows the movement of monthly retail price of coffee powder in Bangalore. These movements clearly show the wide difference in retail prices between pre- and post-liberalisation periods.

Table 14. Wholesale Price of Coffee Seeds in Bangalore: 1990 to 1996

Year (1)	Wholesale Price (Rs per kg)		
	Arabica Plantation 'A' (2)	Arabica Cherry 'AB' (3)	Robusta Cherry 'AB' (4)
1990	40	34	31
1991	47	43	37
1992	35	36	29
1993	48	43	37
1994	101	93	82
1995	110	96	90
1996	101	83	69

Source: Statistical Division, Coffee Board, Bangalore.

Table 15. Retail Price of Coffee Powder in Bangalore: 1994 to 1996

Year/Month (1)	Retail Price (Rs per kg)		
	1994 (2)	1995 (3)	1996 (4)
January	77	163	110
February	73	164	136
March	71	164	138
April	80	167	136
May	91	169	137
June	120	163	140
July	154	160	140
August	162	159	142
September	171	159	149
October	174	159	150
November	174	145	147
December	166	140	150
Descriptive Statistics			
Mean	126.08	159.33	139.58
Range	103.00	29.00	40.00
Standard Deviation	42.74	8.18	10.32

Source: Basic data are from the Statistical Division, Coffee Board, Bangalore.

#### VI. MAJOR IMPLICATIONS OF THE IMPACT ANALYSIS

It should be emphasised that the impact of liberalisation may not be strictly isolated in terms of production, consumption, distribution or exchange activities in the coffee sector. In fact, several impacts may be interdependent. For instance, impact of liberalisation measures on domestic consumption may be a consequence of liberalisation-induced changes in domestic marketing, pricing and supply of coffee. In a descriptive analysis like the one in this paper, such interdependent impacts may be captured only in terms of deriving a set of implications of the liberalisation measures for the sector at large. This is attempted below.

First, since the start of liberalisation measures in 1993, the market price of coffee, in all its descriptions, has steeply increased. This price increase can be accounted by (a) changes in world production, marketing, pricing and prices of coffee; (b) changes in internal marketing and pricing of coffee in India; and (c) changes in exports of coffee from India to the world market. This suggests that the recent domestic price

increase cannot be solely attributed to liberalisation measures of internal and export marketing of coffee in the country.

Second, the increased internal and export price of coffee, under liberalisation measures, seem to have benefitted the domestic producers and exporters of coffee. This is evident from the increasing export earnings due to a rising unit value of exports of coffee in India since 1993 in Table 16. However, a mere high world market price for a domestic commodity does not ensure higher export earnings unless the exchange rates are favourable to the domestic-exporting country. Fortunately, the nominal exchange rates between the Indian rupee and US dollar have not been drastically appreciating (i.e., the dollar has not been getting less rupees in exchange) over the years. This is clearly evident in Table 17 where the monthly minimum and maximum nominal exchange rates between Indian rupee and US dollar, in terms of the Reserve Bank of India (RBI) reference rate, are presented from 1991-92 to 1996-97. In short, the movement of exchange rates have not been unfavourable for the domestic-exporters in the country.<sup>13</sup>

Table 16. Unit Value of Exports of Coffee by Types in India: 1991-92 to 1995-96

Year (1)	Average Price (Rs per kg)		
	Arabica Plantation 'A' or Other Mild Arabica (2)	Arabica Cherry 'AB' or Arabica (3)	Robusta Cherry 'AB' or Robusta (4)
1991-92	40.09	31.48	25.30
1992-93	32.39	29.89	26.98
1993-94	43.19	38.48	38.04
1994-95	93.95	86.83	79.81
1995-96	86.49	77.91	79.33

Source: Statistical Division, Coffee Board, Bangalore.

In addition, the Union Government's tax policy has been favourable not only for coffee exports but also for sharing the earnings by the growers themselves. This is evident from the data on low revenue from export taxes (i.e., export duties and export cess) on coffee by the Union Government of India (Table 18).<sup>14</sup> Note that, in absolute terms, revenue from export taxes does not appear to be significant and consistent. In relative terms, however, the trends in revenue are different between export duties and export cess on coffee. For instance, revenue from export duties on coffee as a percentage of total revenue from export duties has increased from 20.17 per cent in 1978-79 to 26.81 per cent in 1988-89 whereas, in the case of export cess, the rise is from 8.32 per cent to 8.54 per cent. From 1990-91, revenue from export duties on coffee was zero, except during 1992-93 to 1994-95. On the other hand, revenue from export cess on coffee as a percentage of total revenue from export cess has been a little lower than 9 per cent before 1990-91 and has remained around 5 per cent since 1991-92. It should be emphasised that a declining export tax may have been effected as an incentive for export promotion. And, coffee may not be an exception to this. Thus, total revenue from export duties and cess on all commodities has remained less than 1 per cent of total export earnings in all the years since 1988-89. And, total revenue from export duties and cess on coffee as a percentage of total export earnings of coffee has remained less than 3 per cent since 1988-89. In short, lower export taxes in India have been used as an instrument of export promotion.<sup>15</sup>

Third, lack of drastic production response to recent price changes may indicate that the benefits of liberalisation are in the form of higher windfall profits, mainly due to world market prices being higher than the domestic market prices, for a given level of production. For instance, data on the annual growth of total coffee exports in value and volume terms in Table 9 clearly show that during 1994-95, total volume of exports has grown less than 1 per cent but total value of exports has increased by 105 per cent. In strict economic terms, however, these profits are a form of pure rent and such profits may not last long.

It should be noted that if the increased windfall incomes of growers have resulted in increased wages and other payments to factors of production due to upward flexibility of factor prices, a broader distribution of income gains is indirectly attributable to liberalisation measures. This is evident, in part, in the rising adult wage rates for coffee estate workers for the quarter beginning April 1, 1995, to similar quarter for 1997 in the following selected States. That is, from Rs 42 to Rs 52.25 in Kerala; from Rs 40.94 to Rs 50.17 in Tamil Nadu and from Rs 33.98 to Rs 40 in Karnataka.<sup>16</sup> However, if factor prices are inflexible downward, a fall in world output prices may not result in lower cost of production in terms of reduced payments to factors of production. This high cost situation may not be conducive to production and production conditions in the long run. Thus, downward inflexibility of factor prices may entail negative long run effects of short term booms in the coffee sector.<sup>17</sup>

Table 17. Maximum and Minimum Monthly Spot Nominal Exchange Rates in Terms of RBI's Reference Rates: 1991-92 to 1996-97

Month	1991-92		1992-93		1993-94		1994-95		1995-96		1996-97	
	Maximum Rate (2)	Minimum Rate (3)	Maximum Rate (4)	Minimum Rate (5)	Maximum Rate (6)	Minimum Rate (7)	Maximum Rate (8)	Minimum Rate (9)	Maximum Rate (10)	Minimum Rate (11)	Maximum Rate (12)	Minimum Rate (13)
(1)												
April	25.83	25.83	25.89	25.89	31.37	31.23	31.37	31.37	31.90	31.38	34.52	34.15
May	25.83	25.96	25.89	25.89	31.34	31.32	31.37	31.37	31.46	31.39	35.43	34.50
June	25.83	25.96	25.90	25.89	31.46	31.37	31.37	31.37	31.42	31.38	35.09	34.84
July	25.83	25.95	25.83	25.83	31.38	31.37	31.38	31.37	31.40	31.70	35.70	35.50
August	25.83	25.83	25.93	25.83	31.38	31.37	31.39	31.37	31.95	31.41	35.78	35.55
September	25.83	25.95	30.05	29.80	31.38	31.37	31.38	31.37	34.15	31.94	35.70	35.68
October	25.83	25.95	30.10	29.99	31.37	31.37	31.40	31.37	35.64	33.83	35.68	35.61
November	25.83	25.95	30.15	24.95	31.37	31.37	31.43	31.37	34.94	34.28	35.82	35.67
December	26.13	25.95	30.56	29.68	31.37	31.37	31.42	31.37	35.18	34.83	35.90	35.72
January	25.83	25.95	31.65	30.74	31.37	31.37	31.40	31.37	36.49	35.18	35.93	35.81
February	26.13	25.80	33.31	31.30	31.37	31.37	31.43	31.37	37.94	35.03	37.00	35.87
March	25.89	25.89	32.06	31.20	31.37	31.37	31.40	31.37	35.71	34.05	35.90	34.05
Descriptive Statistics												
Mean	25.88	25.91	28.94	28.08	31.38	31.35	31.39	31.37	34.02	33.03	35.70	35.25
Standard Deviation	0.11	0.06	2.73	2.43	0.03	0.04	0.02	0.00	2.20	1.55	0.55	0.64

Source: Compiled from various issues of RBI's *Monthly Bulletins and Weekly Supplements*.

Table 18. Revenue from Export Taxes on Coffee for the Union Government: 1978-79 to 1997-98

Year	Export Duties			Export Cess			Total Revenue from Export Duties and Cess as Per Cent of Total Export Earnings	Total Revenue from Export Duties and Cess on Coffee as Per Cent of Total Export Earnings from Coffee
	Total Revenue from Export Duties (Rs Crore)	Total Revenue from Export Duties on Coffee (Rs Crore)	(3) as a Percentage of (2)	Total Revenue from Export Cess (Rs Crore)	Total Revenue from Export Cess on Coffee (Rs Crore)	(6) as a Percentage of (5)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1978-79	131.26	26.48	20.17	9.26	0.77	8.32	2.454	16.718
1988-89	22.79	6.11	26.81	29.64	2.53	8.54	0.259	2.519
1990-91	0.93	0.00	0.00	34.88	2.11	6.05	0.110	0.833
1991-92	15.91	0.00	0.00	45.81	2.57	5.63	0.140	0.829
1992-93	128.86	8.94	6.94	54.33	2.56	4.71	0.341	3.056
1993-94	39.59	4.24	10.71	85.6	3.01	4.59	0.151	1.459
1994-95	53.34	9.55	17.90	84.09	3.45	4.10	0.167	1.276
1995-96	-0.71	0.00	0.00	110.11	5.6	5.09	0.821	0.371
1996-97 (R.E.)	2.6	0.00	0.00	140.35	6.35	4.52	0.135	0.515
1997-98 (B.E.)	3.1	0.00	0.00	163.00	7.55	4.63	N.A.	N.A.

Notes: 1. All figures of exports duties and cess are net of refunds.

2. The figures of Union excise duties are net of refunds and drawbacks.

3. N.A. refers to not available and R.E. (or B.E.) refers to revised (or budget) estimate.

Source: Compiled from various issues of the Budget documents of the Union Government.

Fourth, other things being equal, the domestic consumers are faced with loss of consumption of coffee due to increased market price of coffee. This is clearly brought out in a survey by Bharath and Shrinivas [1995], under sponsorship of the Indian Coffee Marketing Co-operative Limited (COMARK), where the drop in demand in the markets covered ranged from 20 per cent in Tamil Nadu and 50 per cent in Andhra Pradesh.

A policy proposed to compensate the consumption loss is subsidisation of coffee price for domestic consumers by financing the subsidy by way of taxing the earnings of coffee exports. In fact, this policy is a topic of current public debate.<sup>18</sup>

In short, the recent changes in India's coffee production, consumption, distribution, market structure and prices have a marked difference between pre-liberalisation and post-liberalisation period. Most importantly, these differences cannot be strictly associated with the domestic lib-

eralisation measures since the side-by-side global changes have been of much influence on the domestic coffee situation.

#### VII. CONCLUSIONS

Under the national economic reforms, especially under the Structural Adjustment Programme, the domestic marketing, exporting and pricing of coffee have been liberalised from institutional barriers/regulations and made highly competitive in both internal and external markets. An impact of liberalisation measures is captured in this paper in terms of recent changes in the production, consumption, marketing, pricing and exporting of coffee in India, in the light of the corresponding changes in the world market for coffee.

The major conclusions of this paper are as follows. First, the recent changes in India's coffee sector cannot be strictly associated with the domestic liberalisation measures since the side-by-side global changes have been of much influence on the domestic coffee situation.

Second, growers and marketing agents in the coffee industry have been reaping windfall profits, but production and productivity of coffee in the country have not positively responded to liberalisation measures in the short run. In the long run, these profits may not be conducive to the production and production conditions in India's coffee sector, especially when output prices start falling in the presence of downward inflexibility of factor prices. Third, market prices (i.e., wholesale price of coffee seeds and retail price of coffee powder) of coffee have steeply gone up for domestic consumers, resulting in loss of domestic demand. However, no policy intervention has been made by the government to protect the interest of consumers. Fourth, complementary government policies, such as export tax policy and foreign exchange rate policy, have been favourable for growers and exporters in the domestic coffee sector as well.

Three major limitations of this study may be pointed out. First, the conclusions above are derived completely on the descriptive interpretation of the basic quantitative data. In reality, several qualitative factors which influence the impacts are unobservable by the data. For instance, the impact of (i) untimely withdrawal of coffee by growers from the auctions, and (ii) default in export contracts on export performance. Such qualitative information is important for a realistic interpretation of results of impact analysis. Second, this study is highly aggregative in nature. In fact, the coffee sector in India comprises very many agents, such as growers, roasters, curers, exporters, traders, dealers and consumers. These agents are involved in growing, processing, grading, marketing, blending, roasting, grinding and consumption of coffee in the country. In reality, the impact of liberalisation may be different on these different agents and on their different activities. And, for assessing these differential impacts, a disaggregative study is essential. The results of such a study may be useful for selective policy interventions in the coffee sector. Third, the results in this paper are merely indicative of the nature and direction of recent policy changes in India's coffee sector. For a conclusive evidence (i.e., either supporting or

confronting) for the impact of liberalisation measures, a thorough empirical analysis is needed. In a way, these limitations underline the potential areas of future extensions of this paper.

The free market mechanism of coffee in India has been started in a setting where both the world and domestic markets are accessible to producers and traders of coffee. The working of this market mechanism may have to be closely observed for next few years without causing any temporary setbacks for the working and impact of liberalisation measures. Otherwise, the liberalisation measures in India's coffee sector would be purely myopic and *ad-hoc*.<sup>19</sup>

#### NOTES

1. The following description draws heavily from the Government of India [1993].

2. For a systematic analysis on (i) fiscal sector reforms, especially the strategies for containing the fiscal deficit, see Narayana [1995a, Pp. 909-932]; (ii) impact of general trade reforms, see Mehta [1997, Pp. 779-84]; and (iii) impact of foreign direct investment, see Subrahmanyam et al. [1996].

3. The Coffee Board is a statutory body constituted under the Coffee Act VII of 1942. Administratively, it is under the control of the Union Ministry of Commerce. Apart from the basic marketing functions, the Board has other functions which include developmental function (e.g., providing financial assistance to coffee estates) and promotional functions (e.g., research in coffee).

4. For a general discussion on changes in international trade and Indian agriculture (including coffee) under the national economic reforms, see Nayyar and Sen [1994] and Bhatia [1994, 403-16].

5. It may be mentioned here that months before this announcement of 100 per cent FSQ, the Coffee Board had felt the effect of 100 per cent FSQ, since coffee growers were not readily coming forward to have their coffee pooled with the Board. This situation was evident in the appeals given by the Chairman of the Coffee Board through newspapers [see, for instance, an appeal by the Chairman in the following newspaper: *Deccan Herald (Sunday Herald)*, Saturday, March 4, 1995, p. III].

6. For the purpose of comparing the institutional features of India's domestic marketing of coffee with countries, such as, Columbia and Ivory Coast, see section 3 in Cardenas [1994, Pp. 351-80].

7. The ICA is signed once in five years. So far, four agreements have been signed in 1962, 1968, 1976 and 1983. To administer the Agreement, the International Coffee Organisation (ICO) is established by the members of ICA with headquarters in London. For an excellent description of the origin, growth and working of the ICA, see Mwandha et al. [1985]. In addition, the book is a useful reference for a detailed account of historical trends in production, consumption and marketing of world coffee.



8. The ICO Composite Indicator Price is the average ex-dock prices of Other Mild Arabicas (or Robusta) in New York and Bremen/Hamburg (or New York and Marseilles) markets. Note that these prices refer to the cash/spot price. However, world market prices of coffee are also available in terms of futures price (i.e., prices determined by future trading) by varieties of coffee. Two most important future markets in the world are New York for Arabicas and London for Robusta.

9. Under the Stock Retention Scheme from October 1, 1993, stocks equivalent to certain percentage of exports are retained. For instance, under the Scheme, 20 per cent (or 10 per cent) of the Robusta exports must be withheld when the ACPC's (Association of Coffee Producing Countries') Robusta Indicator Price is below US 60.01 cents per lb. [For details, see World Bank, October 1993, p. 12]. It might be added here that India is not a member of ACPC. For details on ACPC, see Coffee Board [Sept. 1994, Pp. 13-16].

10. For a historical note on the production and productivity of Indian coffee up to the early 1980s, [see Ramaiah, 1986, Pp. 63-68].

11. Apart from variety, quality is an important aspect of coffee. For a recent general discussion on the quality aspects of Indian coffee, [see Menon, 1994, Pp. 353-59].

12. Another way of looking at the annual performance of exports of coffee is to compare the targets and achievements of exports. For instance, the annual export target for coffee, as reported in Matthai and Vithal [1997], was 100,800 tonne (Rs 280 crore) for 1990-91; 120,000 tonne (or Rs 400 crore) for 1991-92; 150,000 tonnes (or Rs 400 crore) for 1992-93 and 1993-94; 150,000 tonne (or Rs 675 crore) for 1994-95; 150,000 tonne (or Rs 1,200 crore) for 1995-96; and 150,000 tonne (Rs 1,500 crore) for 1996-97. As compared to the data on the achievement of exports (in terms of value and volume) of coffee in Table 9, it is evident that the achievements are more than the targets only for the volume of export during 1995-96 and 1996-97.

13. In addition to spot nominal exchange rate in terms of reference rate, the monthly bulletins and weekly statistical supplements of the RBI publish information on foreign exchange in terms of other rates. These rates include (i) Real and Nominal Effective Exchange Rates (based on 36-country bilateral rates) with export and trade weight; and (ii) spot rates for daily/weekly indicative bilateral, nominal exchange rates of Foreign Exchange Dealers' Association of India.

14. Apart from the export taxes, the Union Government collects revenue on coffee in the form of basic Union excise duties on coffee. However, the revenue from this source has been quite negligible over the years. For instance, revenue from excise duties on coffee as a percentage of total excise duties was 0.91 per cent in 1978-79, 0.06 per cent in 1988-89 and has remained less than 0.03 per cent since 1990-91.

In addition to the Union Government, the State Governments in India can also levy tax on coffee in the form of purchase or sales tax. For instance, during 1993-94, the rate of Purchase Tax was 10.5 per cent in Karnataka, 8.8 per cent in Kerala and zero in Tamil Nadu. And, the Karnataka Sales Tax Act, which makes dealers liable for registration and for sales tax (if their turnover exceeds Rs two lakh), has exempted the agriculturists from sales tax when they sell coffee seeds produced by them to companies, but companies are liable to pay tax upon the turnover of coffee grown on the land owned

by them and sold in the course of intra-state trade. In the budget for 1996-97, the sales tax on coffee at the purchase point is shifted to the first sale point; and on coffee seeds is reduced from 6 per cent to 4 per cent. However, sales tax on coffee powder/french coffee and instant coffee continue at 12 per cent and 15 per cent, respectively.

15. According to the World Bank, an important argument for the export taxes in coffee-producing countries is to avoid the so called 'Dutch disease'. In essence, the 'disease' is associated with the phenomenon when a windfall with one booming sector results in price increases, especially in factor markets and the subsequent decline in other sectors. As a consequence of export boom, large inflow of foreign currency cause the real exchange rate to appreciate (i.e., the amount of goods and services that can be purchased in domestic economy, given domestic prices, with one unit of a foreign currency (i.e., converted at the nominal exchange rate) is larger than the amount of goods and services that can be purchased with one unit of a foreign currency at prices in that foreign country). Exports of other commodities become less competitive and production falls. When the boom ends, exports will be less diversified and export industries considerably weaker than they would otherwise have been. For details, [see Mills and Nallari 1992, Pp. 59-60].

16. These wage figures are reported in different issues of *The Planters' Chronicle*. In fact, the wages refer to the basic plus Consumer Price Index (CPI)-linked dearness allowance. Thus, a part of the increase in these wages are attributable to an increase in general consumer prices in the economy.

17. This situation is referred to as a form of 'dutch-disease' for the Indian coffee in Narayana [1995b, p. 9].

18. For instance, the tax-subsidy proposal is argued mainly against in Narayana [1994, Pp. 142-59] for there exists little possibility for a large scale additional export taxation on coffee exports from India for it would reduce the price competitiveness of Indian exports in world markets and, therefore, is against the objective of export promotion. On the other hand, Narayana [1996, p. 6] has considered the feasibility of three alternative policy interventions to safeguard the domestic consumers from price rise: (1) allowing imports; (2) ban on exports; and (3) reimposing controlled regime through Coffee Board. Allowing for imports is argued to be a plausible intervention provided that (i) in no case, allowing for imports should be a pretext for dumping, and (ii) imports should not be allowed once the domestic market prices are equal to or less than world market prices.

19. For instance, a temporary setback for liberalisation was evident when the government had put quantitative restrictions on exports (i.e., through issuing the export permits) and a ceiling of 110,000 tonne was announced for 12 months period from January to December 1994. This ceiling was subsequently raised to 120,000 tonne. However, the restrictions were removed with effect from January 1, 1995. Most recently, a ban on export permits is said to be under serious consideration to bring down the domestic coffee prices.

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# REGIONAL DEVELOPMENTAL DISPARITIES

## A Supplementary Note

S. M. Vidwans

The purpose of this note is to tie some loose ends in my paper on the same subject published in this Journal in its Volume VIII, Number 3, July-September 1996.

### UNIT FOR RECKONING DISPARITIES

The issue of the unit that is to be reckoned for removal of disparity was discussed in a separate sub-section of Section IV of the paper. (See its paragraphs 4.44 to 4.50.) In the beginning, paragraph 4.44 pointed out that:

'It should be obvious that as one sub-divides people into smaller groups for comparison among them, the phenomenon of disparity will stand out with greater sharpness, the magnitude of disparity will be magnified and so will the necessary resources needed to bring about equality among the (smaller) groups or the period that will be taken to eliminate disparity'.

Taking the example of the scheme of allocation of additional resources: 8,000 teachers in the first year, with the number growing at 3 per cent per year, and noting that the district level disparity will be eliminated in a little more than 50 years, that paragraph concluded by saying:

'If, using the same amount of resources, we were to reckon and attempt to eliminate disparity at the lower level of taluka, the realisation of the goal of equality will be pushed further away in time, making the prospects of removal of disparity more dismal than before. If that is not to happen, we will need much larger resources than what were actually available'.

A small correction is necessary in the first of these last two sentences in its beginning. It should read: 'If, using the same initial amount of additional resources and increasing them at the same growth rate, we were to attempt .....'.

The material point is that there are, however, two exceptions to this general conclusion. The first is the case when there exists a physical upper limit to the value of the indicator. For example,

if the indicator is the percentage of potential achieved, the upper limit is 100 per cent. In such a case, if the maximum among the district level values of the indicator is already equal to the upper limit, the total (size of) initial disparity, as defined in paragraph 4.15 of the paper, remains the same independent of the unit for reckoning disparity. The reason is obvious; the maximum value of the indicator, even at any lower level, such as a taluka, will be equal to the physical upper limit (100 per cent). In such a case, the lowering of the unit will not have any effect on the cost of elimination of disparity.

The Fact Finding Committee (FFC) used the percentage of potential achieved as the appropriate indicator of development for the sub-sectors of Terracing, Nala Bunding and Land Development cum Horticultural Development. Also, in these cases, the maximum district level indicator value was 100 per cent, the ultimate achievable value. In these sub-sectors, the lowering of the unit from district to taluka, for elimination of disparity among units, will not entail a larger requirement of resources than what are needed for elimination of district level disparity. In the case of the sub-sector of Counter Bunding, where too the indicator was the percentage of potential achieved, the district level maximum indicator value (99.33 per cent) was a little less than 100 per cent. In its case the lowering of the unit to taluka would increase the cost of elimination of disparity only marginally, at the most in the proportion of 99.33 to 100.00, that is, by 0.7 per cent.

Thus, in case there is an upper physical limit to the indicator value, the *maximum* increase in cost because of the lowering of the unit will be given by:

$$\left[ \left( \frac{\text{Physical Maximum}}{\text{Observed maximum}} \right) - 1 \right] \times 100 \text{ per cent.}$$

The *second* type of case where the same will hold good, but under some conditions, arises for a sector of development where the indicator value cannot exceed a certain *norm*, an ideal value, and in planning the development activity the goal is to achieve this norm. For example, the sector of education, the norm might be fixed in terms of the number of teachers per unit of population. If, (1) the norm has not been, and will not be, allowed to be exceeded at the lowest administrative level conceivable for the execution of the programme and the application of the norm, and if, (2) the observed maximum value of the indicator at the district level equals this norm, the cost of elimination of disparity at levels below the district will be the same as that of doing the same at the district level. Here too, if the observed district level maximum is less than the norm, the upper limit to the increase in cost is given by the same formula as above by substituting the value of the norm for the value of the physically maximum value.

#### THE BACKLOG REMOVAL PROCESS

The Appendix to the paper explained, in its paragraphs A.1 to A.8, the alternative method I had suggested of districtwise allocation of additional resources for reduction of disparity. A comparison of this method with the FFC's method (paragraphs A.9 to A.24) brought out several demerits of the latter and the superiority of the former. Two additional points can be made on this issue.

#### *FFC's Method Non-Commutative*

In paragraph A.23 it was shown that the FFC's method was *non-additive*, that is, it produced different results depending upon whether a given amount of additional resource is (deemed to have been) applied at one stroke or in two or three phases, with portions of resources applied at each phase. An example clarified that in the latter case the most backward districts always suffered, the more so the more they are backward. It should be also clear from the logic of that process, that such

districts will also suffer more the more the number of phases. The alternative method does not suffer from this defect.

A further subtle point that remained to be stated was that the FFC's method is *non-commutative*, that is, the result is not independent of the sequence in which the (unequal) portions are applied in these phases even though the total of these portions remained the same. In mathematical terms, this means that

$a + b$  is not the same as  $b + a$

For example, in the illustration of the primary teachers considered in the Appendix, the total initial backlog was 12,890 teachers. If as many additional teachers are appointed in a single plan, the indicator values of all the backlog districts, Pune down to Parbhani, will be raised to 364.64, the initial average of the indicator values for all the districts. But suppose this is done in two phases, *first*, 4,890 are distributed for appointment over the backlog districts by the FFC's method and, in the *second* phase, after calculation of new indicator values and backlog, 8,000 additional teachers are distributed for appointment over the new backlog districts by the FFC's method. At the end of this two-phase process, the indicator value of Parbhani, the most backward district, will be raised only to 347.57 and, similarly, that for the seven next backlog districts of Aurangabad to Beed will be depressed below 364.64, a value that could have been achieved for them in a single allocation of 12,890 teachers at one stroke. The loss of a district is more the more backward it is. This is because, as pointed out in paragraph A.23 of the paper, the FFC's method is not additive.

But there is more to it than this. For, if the *sequence* of doses is *reversed*, that is, in the first phase we increase the teachers' number by 8,000 and in the second phase by 4,890, Parbhani's indicator value is further depressed to 345.22, and so are the values of the indicator for the seven districts mentioned above by smaller amounts.

The table below brings together the (different) of the same total resources for the initially backlog results of the three different schemes of allocation districts.

**The Consequences of Application of FFC's Method in Several Phases**

**Total Initial Backlog = 12,890 Teachers**

Sr. No.	Backlog District	Initial Indicator Value	Final Indicator Value According to Schemes		
			A Single Dose of 12,890 Teachers	In Two Phases: i) 4,890 ii) 8,000 Teachers	In Two Phases: i) 8,000 ii) 4,890 Teachers
(1)	(2)	(3)	(4)	(5)	(6)
12	Pune	359.42	364.64	370.20	370.75
13	Akola	357.81	364.64	369.90	370.39
14	Osmanabad	357.79	364.64	369.92	370.42
15	Yavatmal	357.02	364.64	369.78	370.24
16	Buldhana	345.84	364.64	367.86	368.12
17	Dhule	343.90	364.64	367.51	367.71
18	Aurangabad	326.21	364.64	364.45	364.28
19	Chandrapur	321.02	364.64	363.52	363.28
20	Bhandara	319.93	364.64	363.33	363.00
21	Nagpur	311.73	364.64	361.95	361.45
22	Thane	292.76	364.64	358.65	357.73
23	Nanded	285.54	364.64	357.40	356.32
24	Beed	280.41	364.64	356.53	355.32
25	Parbhani	228.71	364.64	347.57	345.22

*Note:* Serial numbers are the same as in Table A.1 of Appendix to the paper.

Thus, for a given total amount of resource employed for reduction in backlog, which in turn determines the total backlog that can be removed, the results that will be obtained by the FFC's method of allocation of that resource will depend upon the number of phases in which the backlog reduction process is divided and on the specific size of allocation, out of the total available, applied in each phase. The more the number of phases, or the larger the allocation in initial phases, the greater is the loss of the most backward districts compared with what they could have achieved in a single allocation of the total resource by the alternative method. The suggested alternative method is free of this defect.

*Diminishing Successive Backlog*

When the additional resources (in a five year plan) exceeded the backlog, the FFC's method was to make the calculations year by year, reworking the backlog reduction process and its calculations every year. The Appendix to the

paper pointed out (A.18 to A.22) that such a process acts against the interest of the most backward districts, and that it would unnecessarily involve (cumbersome) repeated calculations (paragraph A.22). In regard to the second aspect, the paper illustrated, using the same example of primary teachers, how calculations are required to be made a number of times (cycles) with the entire amount of successive backlog being removed in each cycle (except perhaps the last one). This takes place because the successive backlog figures exhibit a diminishing sequence. It was stated in paragraph A.22: 'One should also note that this is not something peculiar about the specific example we have considered'. In fact, this will always take place because of an underlying mathematical relationship. The relevant proof is given at the end of this note.

Incidentally, a small error in paragraph A.16 of the paper needs to be corrected. In its second sentence, a reference has been made to paragraph A.10; it should be to paragraph A.11.

DECREASING SEQUENCE OF BACKLOG:  
MATHEMATICAL PROOF

1. Let  $k$  denote the number of regions,  $P_i$  the population of the  $i^{\text{th}}$  region,  $Y_i$  the total of the variable in the numerator of the indicator for the  $i^{\text{th}}$  region and  $y_i$  the value of the indicator for the  $i^{\text{th}}$  region. Then

$$y_i = Y_i/P_i \quad \text{for } i = 1, 2, 3, \dots, k. \quad \dots(1)$$

Let us assume that the regions are ordered in the increasing order of the indicator values, so that

$$y_1 < y_2 < y_3 < \dots < y_k \quad \dots(2)$$

We do not consider the case when the values of the indicator for two regions are equal. For if, say,  $y_2 = y_1$ , we can combine the two regions into one with population equal to  $(P_1 + P_2)$  and indicator value equal to  $y_1$ . This has no effect on the calculation of the average or backlog initially as well as throughout the process of removal of disparity.

2. Since, in understanding the disparity removal process by the FFC's method, we have to calculate means of groups of regions starting from the first region and going up the ladder of indicator values, we shall need further notation.

Let  $P^{(u)}$ , and  $Y^{(u)}$  denote the values of the total population and the total of  $Y$  values of the **first**  $u$  regions *from below*, ( $u \leq k$ ); then,

$$P^{(u)} = P_1 + P_2 + P_3 + \dots + P_u \quad \dots(3)$$

$$Y^{(u)} = Y_1 + Y_2 + Y_3 + \dots + Y_u \quad \dots(4)$$

which can also be written as

$$Y^{(u)} = (Py)^{(u)} \quad \dots(5)$$

where

$$(Py)^{(u)} = P_1 y_1 + P_2 y_2 + P_3 y_3 + \dots + P_u y_u \quad \dots(6)$$

The average indicator value of these  $u$  regions is given by

$$M^{(u)} = \frac{Y^{(u)}}{P^{(u)}} = \frac{(Py)^{(u)}}{P^{(u)}} \quad \dots(7)$$

3. Initially,  $M_0$ , the overall *average* indicator value *for all the regions*, is given by

$$M_0 = M^{(k)} = Y^{(k)}/P^{(k)} = (Py)^{(k)}/P^{(k)} \quad \dots(8)$$

Suppose now that only the first  $r$  regions from below have indicator values less than  $M_0$ , that is,

$$y_1 < y_2 < y_3 < \dots < y_r < M_0 < y_{(r+1)} \quad \dots(9)$$

then the total initial backlog of all these regions is given by  $B_0$ , where

$$B_0 = P^{(r)}M_0 - Y^{(r)} = P^{(r)}\{M_0 - M^{(r)}\} \quad \dots(10)$$

When the backlog of the first  $r$  regions is removed, the indicator value of every one of these regions becomes equal to  $M_0$ .

4. At the next stage, the new average value becomes

$$M_1 = \{Y^{(k)} + B_0\}/P^{(k)} = M_0 + B_0/P^{(k)} \quad \dots(11)$$

Obviously,  $M_1 > M_0$ , that is, the new values of the first  $r$  regions are all less than the new average. In addition to them, suppose that the indicator values of the next  $(s - r)$  additional regions, with  $s \geq r$ , are also less than  $M_1$ , that is,

$$M_0 < Y_{(r+1)} < Y_{(r+2)} < Y_{(r+3)} < \dots < Y_s < M_1 < Y_{(s+1)} \quad \dots(12)$$

For these  $(s - r)$  regions,

$$\text{total population} = P_{(r+1)} + P_{(r+2)} + \dots + P_s = P^{(s)} - P^{(r)} \quad \dots(13)$$

$$\text{total of variable values} = Y_{(r+1)} + Y_{(r+2)} + \dots + Y_s = Y^{(s)} - Y^{(r)} \quad \dots(14)$$

$$\text{and the average indicator value} = (Y^{(s)} - Y^{(r)})/(P^{(s)} - P^{(r)}) \quad \dots(15)$$

$$\text{which can also be written as} = \{(P^{(s)}M^{(s)} - P^{(r)}M^{(r)})/(P^{(s)} - P^{(r)})\} \quad \dots(16)$$

At this stage we shall then have  $s$  regions which have a backlog, and the new backlog  $B_1$  will be given by

$B_1$  = New backlog of the first  $r$  regions **plus** backlog of the next  $(s - r)$  regions, that is,

$$B_1 = P^{(r)}\{M_1 - M_0\} + \{[P^{(s)} - P^{(r)}]M_1 - \{Y^{(s)} - Y^{(r)}\}\}$$

and using Equation (14),

$$\begin{aligned} B_1 &= P^{(r)}\{M_1 - M_0\} + \{[P^{(s)} - P^{(r)}]M_1 - \{Y^{(s)}M^{(s)} - P^{(r)}M^{(r)}\}\} \\ &= P^{(s)}M_1 - P^{(r)}M_0 - P^{(s)}M^{(s)} + P^{(r)}M^{(r)} \end{aligned}$$

Using the value of  $M_1$  from Equation (11)

$$\begin{aligned}
 B_1 &= P^{(s)}B_0/P^{(k)} + P^{(s)}M_0 - P^{(r)}M_0 - P^{(s)}M^{(s)} + P^{(r)}M^{(r)} \\
 &= P^{(s)}B_0/P^{(k)} + \{P^{(s)} - P^{(r)}\}[M_0 - \{(P^{(s)}M^{(s)} - P^{(r)}M^{(r)})/(P^{(s)} - P^{(r)})\}] \quad \dots\dots (17)
 \end{aligned}$$

Now, from Equation (16),  $\{(P^{(s)}M^{(s)} - P^{(r)}M^{(r)})/(P^{(s)} - P^{(r)})\}$  is the average value of indicator for the regions  $(r + 1)$  to  $s$ , each of which has indicator value greater than  $M_0$ , and, therefore, their average is greater than  $M_0$ . As a result, the second component of the above expression is negative. From this it follows that

$$B_1 < P^{(s)}B_0/P^{(k)}$$

But  $P^{(s)}/P^{(k)}$  will be always less than one, therefore

$$P^{(s)}B_0/P^{(k)} < B_0$$

Thus,

$$B_1 < P^{(s)}B_0/P^{(k)} < B_0$$

In case  $s = r$ , that is,  $M_1 < y_{(r+1)}$ , that is, only the first  $r$  regions remain the backlog regions at the second stage also, the second component does not arise at all, and

$$B_1 = P^{(s)}B_0/P^{(k)} < B_0$$

In either case thus we have established that  $B_1 < B_0$ ; by a repeated application of this derivation we get

$$B_0 > B_1 > B_2 > B_3 > B_4 > \dots\dots\dots$$

that is, the successive backlog amounts form a decreasing sequence.



## **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 suggestions regarding official documents or parts thereof for inclusion in this section.

In the present section we publish:

1. Report of the Land Acquisition Review Committee on Land Acquisition Act, 1894 (Chairman: Anand Narain Mulla), Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture), Government of India, New Delhi, 1970, Chapter 9.
2. Report of the National Commission on Labour (Chairman: Dr. P.B. Gajendragadkar), Ministry of Labour and Employment and Rehabilitation, Government of India, New Delhi, 1969, Chapters 4, 15, 16 and 17.

# REPORT OF THE LAND ACQUISITION REVIEW COMMITTEE ON LAND ACQUISITION ACT, 1894

## CHAPTER 9

### EXTENT OF GOVERNMENT RESPONSIBILITY FOR REHABILITATION OF EVICTED FAMILIES AND RECOMMENDATIONS ABOUT DISCHARGE OF (T)HIS RESPONSIBILITY

9.1. The fourth term of our reference requires us to examine the extent of Government responsibility for rehabilitation of evicted families in cases of acquisition of land for projects and the steps that may be taken for the discharge of this responsibility. In order to examine the complex socio-economic problem of rehabilitation we invited the views of the State Governments/private organisations/individuals, etc. on the following questions:

- (i) whether the cost of rehabilitation on displaced persons should be charges towards cost of acquisition over and above the compensation and/or found out of general revenue or special levies;
- (ii) who should be included in the category of 'displaced persons';
- (iii) whether persons who indirectly suffer damage as a result of acquisition, e.g., the labourers, artisans and similar other classes of persons who lose their occupations due to whole-sale shifting of the inhabitants when large areas are acquired, should be included in the term 'displaced persons'; and
- (iv) what should be the nature and extent of responsibility.<sup>1</sup>

#### Position of Law under Land Acquisition Act

9.2. Under the Land Acquisition Act, 1894, no compensation is payable to the persons who are not interested in the land on the ground that their earnings have been affected by the change of ownership or indeed on any ground. However, if the acquisition injuriously affects the earnings of the person interested, he is entitled to claim further compensation beyond the market value of the land.

9.3. Section 23(1) clauses fourthly and fifthly of the Land Acquisition Act, 1894, provides, to some extent, for payment of compensation for rehabilitation of persons interested in the land acquired. In determining the amount of compensation, the Court is required to take into consideration under the clause fourthly of Section 23(1), the damage (if any), sustained by the person interested, at the time of the Collector's taking possession of the land, by reason of the acquisition injuriously affecting his other property, movable or immovable, in any other manner, or his earnings. A claim of compensation under this provision would be tenable only if three conditions are fulfilled namely:-

- (1) The party must be a person interested in the land acquired;
- (2) The damage must have been sustained at the time of the Collector's taking possession of the land;
- (3) The damage must be by reason of the acquisition injuriously affecting his other property, (Movable or Immovable) in any other manner, or his earnings.

#### Persons interested in the land acquired

9.4. Under the existing law, compensation for the injurious affection of the earnings can be claimed by the 'person interested' in the land acquired. The expression 'person interested' as defined in Section (S.) 3(b) of the Land Acquisition Act, includes 'all persons claiming an interest in compensation to be made on account of the acquisition of land under this Act, and a person shall be deemed to be interested in land if he is interested in an easement affecting the land'. For claiming compensation it must be shown that some land of the claimant has been taken in which he claims an interest or over which he has an easement. Quarry-men, ploughmen or diggers who work for wages are not persons interested. The Privy Council had rejected the claim of forty-six quarry-men for loss of earnings in consequence of acquisition of mines from a

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<sup>1</sup> See question D.17 of the questionnaire issued by the Committee (Appendix 5) (not printed here).

Zamindar<sup>2</sup> and held that "if the acquisition injuriously affects the earnings of the person interested, he is to obtain further compensation beyond the market value of the land. But no compensation is given to persons not interested in the land on the ground that their earnings may be affected by the change of ownership, or indeed on any ground. The forty-six quarry-men are not more interested in the land than a ploughman or a digger is interested in the land on which he works for wages. Nor are their earnings the earnings of their Zamindar, who is interested".

9.5. However, the expression 'person interested' is of wide amplitude and covers not only an owner of the land acquired but also persons who have a possessory interest in land. A tenant of land has an interest in the land and his earnings as a tenant may also be injuriously affected by reason of the acquisition of the land.<sup>3</sup>

9.6. The Government of Gujarat<sup>4</sup> had amended the Land Acquisition Act to provide specifically that the damage sustained by the tenant of the land by reason of the acquisition injuriously affecting his right as tenant should be taken into consideration. The Government of West Bengal, has, by an amendment of the Act<sup>5</sup> included 'Bargadar', i.e., the person who cultivates the land of another person on condition of delivering a share of the produce of such land to that person in the expression 'person interested' and compensation is payable to him for the loss of earnings in consequence of the acquisition of land where earning was derived directly from such land.

#### **Damage sustained at the time of Collector's taking possession of the land**

9.7. Another condition for sustaining a claim of compensation under clause fourthly of Section 23(1) is that the damage must have been sustained

"at the time of the Collector's taking possession of the land". The words "that the damage must be sustained at the time of Collector's taking possession" have been interpreted to mean the time when the damage takes place and the right to compensation arises, and it is sufficient to bring a case within this provision if, when possession is taken, there is other property or earnings injuriously affected, so as to cause some damage to the person interested.<sup>6</sup> The compensation is payable not only for the damage which has actually been caused at the time of Collector's taking possession of the land but also the one which can be reasonably anticipated and estimated<sup>7</sup> at that time.

#### **Injurious affection of earnings by reason of acquisition**

9.8. The compensation payable is for the injurious affection of earnings by reason of acquisition. Injurious affection merely means depreciation in value of earnings.<sup>8</sup> The word 'earnings' has not been defined in the Act. The courts have given it ordinary dictionary meaning, e.g., money earned by personal labour or skill<sup>9</sup> or money earned by trade or other service carried on by the owner in the premises acquired.

9.9. A person is entitled to claim damage for loss of earnings if he carries on some business in the acquired premises and by virtue of the acquisition he is deprived of his profits by reason of the fact that he cannot find any other place where he can carry on the business in which he was engaged on the acquired premises.<sup>10</sup> Loss of earnings to be an injurious affection must be one in trade or other services carried on by the owner

2 Secretary of State v. Shanmugaraya Mudaliar, ILR 16 Mad. 569. (P.C.)

3 Collector of Bilaspur v. Hans Raj, AIR 1961 H.P. 25.

4 By S. 14 of the Land Acquisition (Gujarat Unification and Amendment) Act, 1963.

5 By S. 3 and S. 4 of the Land Acquisition (West Bengal Amendment) Act, 1963.

6 Collector of Dinajpur v. Girja Nath Roy, 25 Cal. 346.

7 Indo Burma Petroleum Co. v. The Collector of Yenang Yaung, 12, I.C. 202; 4 Burma L.T. 250.

8 Duke of Buccleuch v. Metropolitan Board of Works (1872) L.R. 5 H.L. 460.

9 Collector, Bilaspur v. Janki Devi, AIR 1961 H.P. 42.

10 Collector, Saharanpur v. Jagdish Saran C. A. No. 457 of 1965 dated 1st March, 1968 decided by the Supreme Court.

in the premises acquired.<sup>11</sup> No damages apart from the market value assessed are allowed on the ground that the owner might have made profits by engaging in a certain trade or business on the land in question.<sup>12</sup> The term 'earnings' also includes any provable diminution in the value of the good-will in trade consequent on the taking of the premises in which such trade is carried on and the consequential loss of his earnings but it does not include prospective earnings.<sup>13</sup> The 'damage' for which compensation is permissible must have been sustained in carrying on a lawful business in lawful manner.<sup>14</sup>

9.10. Normally compensation for the loss of trade or business earnings is awarded on the basis of income of such period, as will sufficiently compensate him under the circumstances of the particular case. In the words of Lord Goddard, "the basic principle, so far as loss of earning and out of pocket expenses are concerned, is that the injured person should be placed in the same financial position so far as can be done by an award of money as he would have been had the accident not happened...."<sup>15</sup>

9.11. In assessing the damage, the ordinary principles of law as to remoteness of damages apply with the result that compensation for loss of trade or business earnings would be in respect of the damages sustained directly on account of taking of land under the compulsory powers.

#### **Compensation for change of residence of business**

9.12. In determining compensation under clause fifthly of Section 23(1) of the Land Acquisition Act, the Court is required to take into consideration reasonable expenses if any, incidental to change of his residence or place of

business, if in consequence of the acquisition of the land by the Collector, the person interested is compelled to change his residence or place of business. The costs of removal consequent on acquisition to new premises are payable under this clause. Expenses of removal include the cost incurred in removal of the family deity, including essential ceremonies.<sup>16</sup>

#### **Position of Law in U.K.**

9.13. The position of law as observed in the United Kingdom is much the same. Where the land of an owner - whether freeholder or lessee - is compulsorily acquired he is entitled to compensation not only for the value of his interest in the land taken but also, in appropriate cases, for the loss he has suffered from being disturbed in his enjoyment of it.

9.14. There is, however, no specific statutory provision or sanction for compensation "for disturbance" but such compensation flows from the application of the principle that the basis on which compensation for lands taken is the value of the lands to the owner.<sup>17</sup>

9.15. No express mention of "disturbance" occurs in the Land Clauses Act, 1845. But in interpreting the words "compensation" and "value" in Section 63 of that Act - now re-enacted in substantially the same form in Section 7 of the Compulsory Purchase Act, 1965 - the courts have always given consideration to the fact that part of the compensation properly payable to him was any loss he might suffer from disturbance. In other words, the owner had "the right to receive

11 Where a site in which a coffee hotel frequented by practitioners in court, is acquired, the loss in income of that trade should also be added to the value of the land - Venkatachariar v. Divisional Officers, Tinevelly, 14 IC 625. On acquisition of a tank the lessee of the tank, who reared and stocked fish in it, has also to be compensated - Narain Chandra Barol v. Secretary of State, ILR 28 Cal. 152.

12 Suresh Chandra Banarjee v. Secretary of State, 100 IC 190, AIR 1927 Cal. 357.

13 L.A. Officer v. Jamnabai, 47 Bom. L.R. 893; AIR 1946 Bom. 142.

14 Naramiyan Umarbhi v. L. A. Officer, 47 Bom. L.R. 853; AIR 1946 Bom. 171.

15 British Transport Commission v. Gowsley, (1955) 8 AIR E.R. 796.

16 Calcutta Improvement Tribunal Case No. 62 of 1926.

17 Para 4-215, Cripps, *Compulsory Acquisition of Land*, 11th Edition.

a money payment not less than the loss imposed on him in the public interest but on the other hand, no greater.<sup>18</sup>

9.16. The Land Compensation Act, 1961 (replacing the Acquisition of Land (Assessment of Compensation Act, 1919), which applies to all compulsory purchase under any statute whether passed before or after the passing of the Act, does not affect the principle of assessment of compensation on the basis of value to the owner. The Act preserves an owner's right to compensation when he is disturbed by the compulsory acquisition.<sup>19</sup>

9.17. Rule 2 of Section 5 of the Land Compensation Act,<sup>20</sup> 1961 now provides that in assessing compensation the value of land shall be taken to be the price which the land, if sold in the open market by a willing seller might be expected to realise. By itself this provision might have ruled out a claim for compensation for disturbance, since a willing seller in the open market does not normally receive his removal and other incidental expenses from the purchaser. But Rule 6 of Section 5 expressly provides that the owner's right to compensation for 'disturbance or any other matter not directly based on the value of land' shall remain unaffected.

9.18. Rule 6 "does not confer a right to claim compensation for disturbance. It merely leaves unaffected the right which existed before the Act of 1919, namely that in a proper case the owner was entitled to claim that the compensation to be paid for the land should be increased on the ground that he had been disturbed."<sup>21</sup>

9.19. The principle governing the assessment of compensation for disturbance is that any loss sustained by a dispossessed owner (at all events one who occupies his house) which flows from

a compulsory acquisition may properly be regarded as the subject of compensation for disturbance provided, first, it is not too remote and, secondly, that it is the natural and reasonable consequence of the dispossession of the owner.

9.20. An owner in possession of land with no potentialities beyond its present use and not contemplating removal would not ordinarily be a willing seller unless the price covered not only the market value of the land but also the expenses arising in consequence of his removal elsewhere.<sup>22</sup> Where, however, the land has potentialities beyond its presence which can only be realised by his giving up possession for exploitation by the purchaser, the owner is entitled to the value of those potentialities. The land has two values to him (i) the existing use value and a right to compensation for disturbance, and (ii) the potential value; and he is entitled to whichever is the higher.<sup>23</sup>

### Measure of Compensation

9.21. Compensation for disturbance includes the cost of sale or removal of furniture or goods and other incidental expenses which the owner/occupier incurs in consequence of being dispossessed of his premises. An owner-occupier, dispossessed of his house and forced to find other premises has been held entitled to recover legal cost, surveyor's fees and travelling expenses in connection with the purchase of new premises, also surveyor's fees for a report on a possible new house, which was rejected as unsatisfactory.<sup>24</sup>

9.22. Loss of business and of goodwill in so far as the business or goodwill enhances the value are to be considered in assessing the compensation and so must the costs of removal, loss incurred

<sup>18</sup> Per Scott, L.J., in *Horn v. Sunderland Corporation* (1941) All E.L.R.I.

<sup>19</sup> Section 5(6) of the Land Compensation Act, 1961, which replaces Rule 6 in Section 2 of Acquisition of Land (Assessment of Compensation) Act, 1919.

<sup>20</sup> Replacing the corresponding rule in the Acquisition of Land (Assessment of Compensation) Act, 1919.

<sup>21</sup> *Horn v. Sunderland Corporation*, (1941) 2 K.B. 26.

<sup>22</sup> Para 4-217, Cripps, *Compulsory Acquisition of Land*.

<sup>23</sup> *Vyricherla Narayan Gajapatiraju v. The Revenue Divisional Officer, Vizagapatam* (1939) A.C. 302, P.C. at p. 313; *Horn v. Sunderland Corporation* (1941) 2 K.B. 26, C.A. at p. 39.

<sup>24</sup> *Harvey v. Crawley Development Corporation* (1957) 1 Q.B. 485.

until suitable premises are 'obtained' and the value of fixtures if taken or the loss on them if not taken. Compensation for the expulsion is based on principles similar to damages in an action for trespass.<sup>25</sup>

### Yearly Tenancies and Lesser Interests

9.23. Compensation for disturbance is a part of the purchase money for the land and the persons interested are those who have had their interests purchased, i.e., persons entitled to a notice to treat (quit), freeholders, lessees, mortgagees, etc. However, a tenant with no greater interest than a tenancy for a year or from year to year, who is not entitled to a notice to treat (quit) and whose interest is not purchased, has a specific statutory right to compensation for the value of his unexpired interest and in addition, compensation for disturbance. If such a person is required to give up possession before the expiration of his term or interest he is entitled to compensation for the value of his unexpired term or interest and for any just allowance, which ought to be made to him by an incoming tenant and for any loss or injury which he may sustain.<sup>26</sup>

### Discretionary payments for Disturbance

9.24. The Land Compensation Act,<sup>27</sup> 1961, gives the acquiring authorities a discretionary power, similar to the existing powers in the Housing Act, 1957, Sections 32, 63 and 100, and the Town and Country Planning Act, 1962, S. 84(5), to pay to any person displaced from a house or building which they acquire reasonable allowance towards-

- (a) removal expenses,
- (b) losses likely to be incurred by a trade or business arising from removal.

9.25. The Agriculture (Miscellaneous Provisions) Act, 1963, S. 22 has recently extended the discretionary powers to allow similar payments to occupiers of agricultural land.

The provisions of the above Acts are summarised below:

*(a) Allowance to persons displaced from houses and buildings.*

In connection with a compulsory acquisition or a sale to an authority possessing compulsory purchase powers, the acquiring authority may pay a person displaced from a house or other building a reasonable allowance towards his removal expenses.<sup>28</sup> They may also pay a person carrying on a trade or business in a house or other building a reasonable allowance towards the loss which he will sustain through disturbance of his trade or business in a house or other building a reasonable allowance towards the loss which he will sustain through disturbance of his trade business consequent on his having to quit.<sup>29</sup> In estimating loss, they must have regard to the period for which the premises might reasonably have been expected to be available and to the availability of other suitable premises.<sup>30</sup>

9.26. These provisions have effect without prejudice to the operation of other similar enactments,<sup>31</sup> e.g., under the Housing Act, 1957.

9.27. Section 30 of the Land Compensation Act, 1961 would appear to be intended to cover cases where there is no legal right to compensation for disturbance, but where the acquiring authority considers that some payment should reasonably be made to the person displaced.<sup>32</sup>

*(b) Allowance to persons displaced from agricultural land.*

9.28. Where any interest in land is compulsorily

<sup>25</sup> See para. 284, pages 163-64 - Halsbury's Laws of England, Vol. 10, Third Edition.

<sup>26</sup> S. 121 of the Lands Clauses Act, 1845 and S. 20 of the Compulsory Purchases Act, 1965.

<sup>27</sup> S. 30 of the Land Compensation Act, 1961.

<sup>28</sup> Land Compensation Act, 1961, S. 30(1)(a).

<sup>29</sup> S. 30(1)(b) *Ibid.*

<sup>30</sup> S. 30(2) *Ibid.*

<sup>31</sup> S. 30(3) *Ibid.*

<sup>32</sup> 8. The Section is a re-enactment of Section 13 of the Town and Country Planning Act, 1959, so that it will apply in any case where the notice to treat (quit) is served after 29th October, 1958, or the contract of sale is made after that date.

acquired or is sold by agreement to an authority possessing compulsory purchase powers and the land is used for the purposes of agriculture by way of a trade or business, and the person carrying on the trade or business is displaced from the land, the authority may pay him such reasonable allowances as they think fit towards his removal expenses.<sup>33</sup> They may also pay him for the loss which, in their opinion, he will sustain by reason of the resulting disturbance of his trade or business.<sup>34</sup> In estimating this loss, regard must be had to the period for which the land might reasonably have been expected to be available for the purpose of the trade or business, and to the availability of other land suitable for that purpose.<sup>35</sup>

9.29. These provisions have effect without prejudice to the operation of other similar enactments.<sup>36</sup>

#### **Extent of Rehabilitation Compensation - Position under the existing law**

9.30. The law in the United Kingdom as well as the law as contained in Clauses fourthly and fifthly of section 23(1) of our Land Acquisition Act, 1894, does provide for payment of compensation attributable to the disturbance involving a change of residence or place of business in consequence of the acquisition of the land. However, this compensation is payable only to the persons interested in the land such as the owners, the tenants and mortgagees in possession, etc. Even in their cases the evidence led before us unmistakably shows that these salutary provisions of law were very frequently treated as a dead letter by the acquiring authority.

#### **Recommendations of Law Commission**

9.31. Though the Law Commission has recommended the retention of clauses fourthly and fifthly of Section 23(1) the question of rehabilitation of evicted families by adopting

other measures was not considered by them. The Commission, however, referred to the suggestion made by the Bihar Government for amending the definition of 'person interested' so as to bring within its scope a person who suffers damage as a result of the acquisition even where no part of his land or right or easement has been acquired or affected. The Bihar Government has pointed out that as a result of the Mayurakshi Reservoir Project in that State, vast areas have (have) been submerged under water and the inhabitants thereof have had to shift to other places. As a result, labourers and professional men working in the sub-merged areas lost their occupation. They were not paid any compensation since no part of their land or right or easement had been acquired or affected and they could not, therefore, be treated as coming within the purview of the expression 'persons interested'. As the suggestion raised an important question of policy, the Commission did not think it fit to enlarge the definition so as to include such cases. However, they expressed the view that the matter deserved careful consideration in as much as the loss suffered by the persons in the instance mentioned was the direct result of the acquisition of the land.<sup>37</sup>

#### **Provisions of two Private Members' Bills introduced in Parliament**

9.32. Before we further discuss this problem, we wish to take note of the provisions of two Private Members' Bills, which we have already referred to in different context, introduced by Shri. S. C. Samanta, Member, Lok Sabha during 1968. Shri Samanta's Bill sought *inter alia* to add a new section to the Land Acquisition Act providing that whenever bulk acquisition of land involves displacement of 100 or more families, it should be the responsibility of the acquiring authority to provide for the rehabilitation of the displaced persons. Shri. Hem Raj's Bill sought to amend the definition of persons 'entitled to act'

<sup>33</sup> Agriculture (Miscellaneous Provisions) Act, S. 22(1).

<sup>34</sup> *Ibid.*

<sup>35</sup> S. 22(2) *Ibid.*

<sup>36</sup> S. 22(3) *Ibid.*

<sup>37</sup> See pages 31-32 of the Tenth Report of the Law Commission on the Law of Acquisition and Requisitioning of Land.

by providing that in case the whole village or blocks of village are acquired, all its residents, viz., tenants, artisans landless labourers, should be deemed to be persons 'entitled to act'. A proviso was also sought to be added to Section 16 of the Act providing that where the acquisition or possession of land involves displacement of 25 families or a full village or block of villages, it should be the duty of the acquiring authority to rehabilitate the displaced persons and their rehabilitation should form the part of the project expenditure. Both the Bills sought to make the rehabilitation of evicted families legal responsibility of the appropriate government under the Act.

#### **Recommendations of Group of Experts**

9.33. The Group of Experts who examined the problem of rehabilitation of displaced persons expressed the view that the Government must assume normal responsibility, in principle, of rehabilitation of persons affected as a result of acquisition of land. The Group has recorded in its report that one view was that a provision should be incorporated in the Act to the effect that the requiring Department should bear the cost of rehabilitation on the scale to be prescribed, but in the end it came to the conclusion that a policy decision on this issue at the level of the National Development Council would be sufficient to ensure necessary provision.<sup>38</sup>

#### **Our Recommendations**

9.34. We have considered the various aspects involved in the rehabilitation of uprooted families and we feel that measures for rehabilitation need not be provided in the body of the Statute. We, however, want to make it clear that our doing so should not be interpreted that we are not in favour of it or that we do not want that the State should give serious consideration to this human problem. We refrained from doing so because no definite set of laws could be suggested as the problem would vary from State to State and from project to project. Still with a view to rehabilitate

(rehabilitating) the land-owners and lessen the injury of being uprooted we have recommended that the amount of solatium to be awarded under Section 23(2) of the Land Acquisition Act should be increased from 15 per cent to 30 per cent. We feel that the increase in the amount of solatium would go a long way in meeting the cost of rehabilitation in the case of the land owners and other persons interested in the land and entitled to compensation under the provisions of the Act.

9.35. We now propose to deal with the problem of the affected families who do not come in the category of 'persons interested'. It was brought to our notice that the problem of displaced persons as a consequence of acquisition of vast areas of land for various development projects undertaken by the State after Independence, has assumed great importance. We were informed that about 1,81,000 families or about 9 lakh persons have been displaced on account of acquisition of land for 16 river valley projects, and in the case of acquisition of land for the 4 Steel Projects, namely, Rourkela, Bhilai, Durgapur and Bokaro, about 16,000 families have been displaced. We had called for information from the State Governments, etc., about the measures adopted by them for dealing with the problem of rehabilitation of families affected as a result of acquisition of land for the projects/schemes of development executed by them. We find that in spite of the fact that there is no legal responsibility on the part of State Governments, etc. to rehabilitate the affected families under the provisions of the Land Acquisition Act, various steps have been taken by them in this direction as a part of their social welfare schemes. Before we make any recommendations in regard to the facilities/amenities which may be provided to the persons displaced consequent on the acquisition of land, we feel it necessary to examine the scope of the definition of displaced persons; the form and nature of assistance necessary for their rehabilitation and the source from which the financial cost involved should be met.

<sup>38</sup> See paras 8.01 and 8.02 of the Report of the Group of Experts.



**Who should be regarded as displaced persons for the purpose of rehabilitation.**

9.36. We called for the views of the State Governments, etc., for ascertaining whether the persons who indirectly suffer damage as a result of acquisition, e.g., the labourers, artisans and similar other classes of persons who lose their occupations due to wholesale shifting of inhabitants when large areas are acquired, should be included in the category of displaced persons.

9.37. A number of State Governments are in favour of including these persons in the category of displaced persons who are compelled to change their residence or place of business. They are also of the view that it is not desirable to specify any class of persons, e.g., labourers, artisans, etc., in the list of displaced persons. The Government of Bihar have, however, suggested that all persons contributing to socio-economic and cultural life of the community including labourers, artisans should be treated as displaced persons. The Government of Orissa have suggested that the Government may provide facilities providing employment to persons whose nature of profession was such that they can take up the profession elsewhere and that no other relief may be provided to them. Some of the State Governments, however, do not favour inclusion in the category of displaced persons those who indirectly suffer damage as a result of acquisition of land (in the category of displaced persons).

9.38. The Group of Experts who examined the problem of rehabilitation was of the view that for the purpose of definition any person who is shifted from his land and habitation as a result of acquisition of his land should be deemed to be a displaced person. The definition of 'displaced persons' so proposed by the Group of Experts refers only to a person who has shifted from his land and habitation as a result of acquisition of his land and does not include persons having no interest in the land but who suffer damage indirectly as a result of acquisition. In our view, such a definition would be too narrow. It has already been pointed out that the existing law enables the person interested to get compensation not only on the basis of the market value of the land acquired but also, to some extent, for the loss he has suffered from being disturbed in his enjoyment of

the land. It is true that it is not possible to compensate each and every individual who has suffered some injury in a large scale acquisition nor can any law be enacted to compensate all the types of injuries caused in the course of a big project but the cases of such labourers and artisans whose occupation is gone and who are compelled to shift and start afresh the struggle for life in new surroundings can be distinguished and need special attention. These persons have no right to compensation under the existing law. We think that the Government should accept a social and moral responsibility for the rehabilitation of such persons as they have been doing under their normal programmes for giving doles to the aged, the infirm and the destitutes. Of course, assistance should be given primarily to the poor and deserving persons who have lost their means of livelihood as a result of the uprooting that is involved in acquisition for big projects. The Government of Maharashtra are of the view that persons rendered landless as a result of large acquisition of land should be provided surplus land made available to the Government under the local ceiling on holdings of agricultural lands Act. In the case of irrigation project some land may be acquired in the command area from big landlords and distributed to persons rendered landless. The Government of Mysore have suggested provision of suitable sites free of cost, construction of roads and drainage works, provision for drinking water, community hall, primary schools, places of worship, approachable roads and irrigation tanks, free transport, credit facilities for building houses, land for cultivation, land for burial ground or such other communal purpose at the places selected for rehabilitation of the oustees. The Government of West Bengal have suggested provision of alternative sites, wherever possible, and employment in the project for which the land is acquired. It was further stated that contract for construction of work for the project should be given as far as possible to displaced persons. The Government of Maharashtra have set up a Directorate of Rehabilitation. The Government of Bihar have also appointed a Director of Rehabilitation for each of the major irrigation or industrial projects for safeguarding the interests of displaced persons.

### Resettlement of Displaced Persons

9.39. The measures for rehabilitation of displaced persons fall broadly into two categories - (i) resettlement and (ii) economic rehabilitation. We propose to deal with the resettlement measures first. The State Government of Assam have suggested that displaced persons may be settled on the waste lands. The Government of Gujarat have suggested that in addition to home sites provided to displaced persons, about 2 to 3 acres of land may also be provided for cultivation to deserving persons who are rendered landless in case they cannot be absorbed in alternative occupations. It would, also be necessary to provide other amenities such as drinking water, roads, schools, etc., in the colonies which might be set up for rehabilitating displaced persons. The Government of Kerala are of the view that the provision for alternative sites should not be made a condition precedent for the acquisition of the land under the Act and that the question of providing alternative sites to displaced persons, employment, etc., should be treated as a detached welfare scheme without disturbing the provisions of the Act. The Kerala State Government do not favour the idea of making land available to all affected persons or of creating a common pool of land in the village, for rehabilitation of displaced persons as the land is scarce in that State. The Government of Madhya Pradesh are of the view that the nature and extent of rehabilitation should vary from place to place depending availability of facilities.

9.40. We find that the State Governments have followed different policies in the project areas for rehabilitation of displaced persons in their respective States. In the case of Damodar Valley Project, the Central Government as well as Government of Bihar and West Bengal left to owners the choice of accepting compensation in cash or kind. The Damodar Valley Corporation reclaimed 4,507 acres of land and set up 4 model villages with 343 houses for hire. The displaced cultivators were allotted culturable waste land. The reclamation work was entrusted to the Government of Bihar though the cost was borne by the Damodar Valley Corporation. In the case

of Hirakund (Hirakud) project, land was allotted to resettlers at a subsidised rate. In the case of the Bhakra Project, the tenants who were ousted were allotted land on either no profit, no loss basis' or at cheap rates. The price of land was recovered in 20 equated half-yearly instalments, the first instalment being payable after 2 years from the date of allotment. The interest was charged at the rate of 5.75 per cent. The land measuring 4 to 8 kanals was allotted free of cost to each artisan and labourer who wished to shift and settle in villages set up in Hissar District, where displaced persons were rehabilitated. Canal water and irrigation facilities were also provided. Brick kiln licensing and free fishing right in Gobind Sagar Lake were provided to deserving owners. A statement giving details of facilities/amenities provided by the various project authorities for resettlement of displaced persons is annexed.

9.41. The rehabilitation assistance may be in cash or kind. It was urged before us that the payment of monetary assistance to displaced persons is not likely to solve the problem in many cases. For example, in the case of tribal people, past experience has shown that cash compensation was frittered away, and that their recurring income declined causing frustration to them. The consensus of opinion among the State Governments is in favour of adoption of other measures for rehabilitation. We are also of the view that mere financial compensation to the persons interested is not adequate to solve the problem of rehabilitation. Unless the Governments set up resettlement colonies with essential community facilities, it is not possible for displaced families who do not own land but are part of the social and economic fabric of the village community to resettle themselves. It is, however, not practicable to lay down any hard and fast rule on the subject. We have already recommended, that the Collector should as far as possible, enter into an agreement with persons interested for granting some other land in exchange of the land that has been acquired. We are of the view that economic equilibrium disturbed by land acquisition should as far as possible be restored by resettlement of displaced families. We recommend that the State Governments concerned should undertake

responsibility for rehabilitation of uprooted families as their social and moral responsibility. They may allot land to displaced families for the purpose of their resettlement either on lease or on a hire-purchase basis. The cost may be recovered by easy instalments with nominal interest. The displaced cultivators may, as far as possible, be allotted surplus culturable land with irrigation facilities. They may be granted taccavi loans for the purchase of seeds, agricultural implements, fertilisers, etc. If the number of displaced families is considerable, new colonies may be set up with necessary amenities such as internal roads, cross drainage works, drinking water, community hall, school, places of worship, burial ground, etc.

### **Economic Rehabilitation**

9.42. We are aware that on account of shortage of land in certain project areas it may not be possible to provide land to the land-holders equal in area to the land acquired by the acquiring authority. In some cases it may not even be possible to provide any cultivable land to the displaced persons or tillers who depend mainly on cultivation. Even in cases where some land has been provided in lieu of the land acquired, the displaced persons may have to be absorbed in certain other vocations or employed on the project, subject to their suitability, to meet their immediate necessities and livelihood. For this purpose they may require training in various crafts. We understand that in most of the projects, suitable measures have been undertaken for imparting training to the displaced persons to enable them to get employment in the project itself. For example, we were informed that at the Ukai Project, centres have been set up for giving training to displaced persons in carpentry, masonry, turning, tailoring, smithy, etc. During the period of training, the displaced persons are given incentives and facilities in the form of stipend at Rs 30 p.m. and provided free accommodation.

9.43. The Government of Rajasthan are reported to have given preference to persons

displaced as a result of the Beas Project for training in the operation and maintenance of heavy earth moving machinery.

9.44. The scheme for the Bokaro project envisages occupational and economic rehabilitation of displaced persons with the assistance of the State Government, the Bokaro Steel Plant and Hindustan Steel Works Construction Ltd. The rehabilitation schemes include employment of oustees from the land after necessary training. The project authorities are required to provide technical training to one child per displaced family. The qualification for eligibility for technical training was also brought down to the 8th standard education as against the normal Matriculation standard prescribed for the purpose. A stipend of Rs 70 to 80 p.m. is given to the trainees. Special Coaching classes in English were also started for the benefit of the trainees. The project authorities allotted shops and stone quarries to displaced persons at a nominal rent with the guarantee to purchase the stone from them. The Project authorities also appointed a Welfare Officer to look after and safeguard the interest of displaced persons.

### **Loans and financial assistance**

9.45. The State Governments and Project authorities have brought to our notice that in cases of large acquisition of land, loans and grants are made available to displaced persons to enable them to start their own vocation.

9.46. In the Bhakra project, new irrigation wells were sunk in the area marked for irrigation purpose and subsidy upto a limit of Rs 750 was allowed upto 200 wells. Taccavi loans were also given upto Rs 1,000 to each displaced family on the basis of security including that of the land assigned free of cost by the Government. Free sites for shops upto 5 cents were assigned in new colonies to traders for opening and running of shops. In Tungbhadra project taccavi loans of Rs 300 per head for reclaiming waste land were granted.

9.47. In the Chambal area persons who did not get any compensation or got less than Rs 500 as compensation were given rehabilitation grant upto Rs 300 per person subject to a maximum of Rs 500 from all sources. This grant helped the people to move from the old villages to new places in search of livelihood.

**Preferential treatment to displaced persons in the matter of employment.**

9.48. It has been suggested that one of the measures which can be adopted for rehabilitation is that the persons displaced as a result of acquisition of land for a big project may be given preference in employment to the posts arising in the industries for the establishment of which the acquisition is sought to be made. We find that the question of giving preferential treatment in employment has assumed great importance after Independence owing to a large-scale acquisition of land required for massive schemes of development. The problem posed by the scheme that the 'sons of soil' or *mulharis* are entitled to preferential, if not exclusive, appointments in industrial establishments started in the respective regions has been considered by the National Commission on Labour in its Report of 1969. As pointed out by the Commission, the demand for the 'sons of soils' have acquired political overtones in many States mainly because economic development has not been commensurate with rising local expectations.<sup>39</sup> In the evidence adduced before the Commission, several unions had complained about the inadequate opportunities and demanded that preference should be given to local persons in the matter of employment, particularly in Undertakings set up by the Central Government and in technical and clerical posts in reputed private sector units.<sup>40</sup>

9.49. The Commission observed that this uneasy feeling about local claims being ignored exists not only among unions, but seems to be shared by the general public. With the large migration of cheap

labour from different parts of the country to industrial centres, the local population find their employment openings blocked. Social problems created by this influx and deep-rooted frustration among the local youth have, at times, even posed a grave threat to law and order.<sup>41</sup>

9.50. The question whether there are legal difficulties in the matter of excluding non-locals from employment in the State must be considered with reference to the provisions of our Constitution. Clause (1) of Article 16 of our Constitution guarantees equality of opportunity to all citizens in matters relating to employment or employment to any office under the State. Article 16(2) states that "no citizen shall, on ground only of religion, race, caste, sex, descent, place of birth, residence or any of them, be ineligible for or discriminated against in respect of any employment or office under the State".

9.51. Article 16 does not, however, prevent Parliament from making any law prescribing, in regard to a class or classes of employment or appointment to an office (under the Government of, or any local or other authority within, a State or Union Territory), any requirement as to residence within that State or Union Territory prior to such employment or appointment.

9.52. Nor does Article 16 prevent the State from making any provision for the reservation of appointments to posts in favour of any backward classes of citizens which in the opinion of the State is not adequately represented in the services under the State.<sup>42</sup> The effect of Article 16 is that nobody can be denied employment in any State on the ground of his being a non-resident in that State.

9.53. While Article 16(1), (2) and (3) refer to Fundamental Rights of a citizen, the Directive Principles of State Policy as embodied in Article 46, cast a duty on the State to protect the weaker sections of the people and in particular of the

39 Para 7.39 of the Report of the National Commission on Labour.

40 Para 7.40 *Ibid.*

41 Para 7.41 *Ibid.*

42 Clause 4 of Article 16.

Scheduled Castes and Scheduled Tribes from social injustice and all forms of exploitation. While it is thus possible for the State to reserve in the services under it appointment of posts in favour of any backward class of citizens, no such discrimination can be made in the matter of employment anywhere in the country for any citizen.

9.54. Article 19(1) of the Constitution has also conferred on every citizen of this country the right to move freely throughout the territory of India, to reside and settle in any part of the territory of India, to acquire, hold and dispose of property and to practice any profession or carry on any trade or business. The National Labour Commission expressed the view that on principle, it is difficult to reconcile this concept with the claim that if an industry is established in a region, it is the inhabitants of that region who are entitled exclusively or at least preferentially to employment in that establishment.<sup>43</sup> The Commission also thought that such a claim, if accepted, would hamper mobility in economic life altogether and create walls of exclusiveness between different regions. However, having regard to the hard facts and realities of life, the Commission has made certain recommendations which they thought can be reasonably and fairly worked out within limits which will not contravene the basic concept of one citizenship and the Fundamental Rights guaranteed to all the citizens. The Commission pointed out that the main elements in the claim on behalf of the 'sons of the soil' have long been recognised by the Government of India when it laid down certain principles in the matter of recruitment to its public undertakings. A copy of the Government Directives containing the principles to be kept in view by the Board of Directors and Managing Directors/Chairmen of public sector projects while making recruitment to posts within their projects is annexed.<sup>44</sup> The Commission thought that the Directive if implemented in the spirit in which it has been drawn up will provide adequate scope to local persons. Since

dissatisfaction still persists in spite of the directive, the Commission recommended that the following steps to supervise its implementation should be taken to remove unjustified apprehension among the local candidates:-

- (i) While recruiting unskilled employees, first preference should be given to persons displaced from the areas acquired for the project and next preference should be given to those who have been living within the same vicinity.
- (ii) The selection of persons to posts in lower scales should not be left entirely to the head of a public sector enterprise. It should constitute a Recruitment Committee with a nominee of the Government of the State within which the unit is located as a member of the Committee.
- (iii) In the case of middle-level technicians, where the recruitment has to be on the all-India basis, a member of the State Service Commission should be associated in making selections in addition to the State Government official on the Board of Directors.
- (iv) Apart from the report sent to the concerned Ministry at the Centre, the undertaking should send a statement at regular intervals, preferably every quarter, to the State Government about the latest employment and recruitment position.

9.55. According to the Commission, the steps recommended above should also be made applicable equally to recruitment in the private sector.

9.56. We endorse the above recommendations of the Labour Commission in connection with rehabilitation of persons displaced as a result of large-scale acquisition of land for projects.

9.57. We are of the view that the payment of compensation for land acquired for industrial and other projects should not be a sufficient discharge of government obligation to land owners and the

<sup>43</sup> Para 6.84 of the Report of the National Commission on Labour.

<sup>44</sup> Annexure II.

rights of labourers and other artisans who have no proprietary right in the land but who are uprooted and lose their jobs and vocations as a result of large scale acquisition of land. After the land passes into the hands of new owners who set up industrial or other units there is sufficient time to train displaced persons and dispossessed land owners whose basic qualifications are sufficient to undertake the requisite training for absorption in the Project.

9.58. We have indicated above various measures which have been adopted by the State Governments/Projects for the economic rehabilitation of displaced persons. We feel that measures like opening of training centres for imparting semi-technical training, advancing of short term loans with nominal or no interest and, in deserving cases, sanction of grants and giving preferential treatment in the matter of employment to lower scale posts should go a long way to ensure economic rehabilitation of displaced persons.

#### **Financial Resources for Rehabilitation**

9.59. We have called for the views of the State Governments as to the source from which the funds should be found for rehabilitation of the displaced persons. Most of the State Governments are in favour of charging the cost of rehabilitation of displaced persons towards the cost of compensation payable to the persons interested. The Government of Rajasthan are of the view that there should be a separate budget for rehabilitating oustees to be charged to the project and not to the acquisition cost. Some State Governments are, however, of the view that the cost of rehabilitation should be met from general revenues, and that it should not form part of the project as it would not be appropriate to inflate the cost of the project which may otherwise be quite heavy.

9.60. The Group of Experts who examined this question was of the view what (that) it did not matter very much from which head of account the funds came. At another place the Group had stated that a policy decision on this issue would be sufficient at the level of the National Development Council to ensure necessary provision. The Group has further stated that in pursuance of such a policy decision, when a suitable scale has been prescribed, the requiring department of Government shall have to make provision and place the funds at the disposal of the State Government concerned for taking rehabilitative measures.

9.61. It was brought to our notice that in the case of the Hirakund (Hirakud) project, the Chambal project (Gandhi Sagar Dam), the D.V.C., Ukai and Koyna projects, the expenditure on rehabilitation was met from the project funds.

9.62. We have recommended earlier that betterment fee may be levied on the adjacent lands which have been benefited by the implementation of the developmental schemes. We feel that part of the cost towards rehabilitation should be met from the funds collected as a result of levying of betterment fees. Ordinarily, it is the project which directly derives the benefit as a result of acquisition of land but as a consequence thereof a number of families are uprooted. The rehabilitation cost should, therefore, form a part of the cost of the project which in many cases are developmental projects and are likely to give returns many times more than the cost incurred in setting them up. In case the project is not a productive one and it is not feasible to levy a betterment fee, or if the funds raised therefrom are not adequate to meet the costs of rehabilitation, the necessary funds should be found from the general revenues. As we have already pointed out, some State Governments are having their normal schemes of social welfare for giving doles, etc. to the aged and the infirm. These schemes may also form part of such social welfare programmes of the State Governments.

**ANNEXURE 1 (Ref. Para 9.40)**  
**A Statement giving details of facilities/amenities provided by the various project authorities for resettlement of displaced persons**

Project/State (1)	Size of the Plot Allotted Residential (2)(a)	Shop (2)(b)	Terms of Allotment of Plot (3)	No. of New Vil- lages/Colonies Established (4)	Construction Assistance; Materials (5)	Loans/Grants (6)	Grants for Shifting of Personal Effects/ Animals (7)	Cost of Shifting Construction Materials (8)
Bhakra and Nangal Project	45' X 100' (i.e., 500 sq. yards).	25' X 50'	..	..	Arranged for slack coal for bricks, G.I. sheets, iron- bars; salvage of construction material of acquired houses allowed free.	Loans for housing were given on a large scale for the new town of Bilas- pur. Those who accepted cash and resettled on their own were given grant of Rs 125 to Rs 150 per family.	Rs 250 plus Rs 15 as Rly./Bus fare per family for shifting plus freight charges for animals + Rs 10 incidental per large cattle + Re 1 per sheep- goat. Oustees who accepted compensation in cash were given Rs 125 per family for resettling within 5 miles and Rs 150 beyond 5 miles.	At concessional rate.
Hirakud Project			Free	17 resettlement camps.	Building material was supplied at 60% of the normal royalty charged for forest material.	..	..	Free
Chambal Project	..		Free in lieu of sites already owned.	..	Allowed to take building material from acquired house free.	..	..	Part payment.
Mahi Right Bank Canal Project	..		On recovery or occupancy price.	..	..	..	..	..
Srisaïam and Pochampad Proj- ects	20 cents to those whose lands had been acquired. 5 cents to those whose lands had not been acquired.	..	Free	..	..	Those who did not settle in rehabilita- tion centres were given 50% of compensation for the house acquired as grant subject to a minimum of Rs 500 and maximum of Rs 2,000 per family.	..	..

(Contd.)

## Annexure (Contd.)

(1)	(2)(a)	(2)(b)	(3)	(4)	(5)	(6)	(7)	(8)
Ukai Dam Project	3 guthas to agriculturists.	..	2 guthas at concessional rates and one gutha at their option at market rate.	..	..	Salvaged material allowed free for houses valued upto Rs 5,000.	Rs 4,000 to Rs 5,000 as loan.	Free for salvaged material for houses valued upto Rs 5,000. At 50% concession for houses valued for Rs 5,000 to Rs 12,000.
	1.5 gutha to non-agriculturists.	..	At concessional rates.	..	..	At 5% of the depreciated value of the house in the case of houses valued between Rs 5,000 - Rs 8,000; 7.5% for houses valued between Rs 8,000 to Rs 12,000; 10% for houses valued above Rs 12,000.		Full rate for houses costing more than Rs 12,000. Transport of household kits free.
Nagarjunasagar Project	10 cents to each family.	..	Free	..	Salvage of construction material of acquired houses allowed free.	Those who receive less than Rs 500 for their house/property, are given ex-gratia payment upto Rs 300.		Free transport. Cash doles are being paid at rates recommended by the Special Collector of the Project.
	Upto a maximum of 25 cents (including free grant of 10 cents).	..	On payment of cost.	..	In case of non-residential buildings, removal of dismantled material was allowed on payment of 75% of the assessed cost.	Subject to the maximum amount of payment of Rs 750.		Salvaged material allowed at their own cost.

(Contd.)



## Annexure (Contd.)

(1)	(2)(a)	(2)(b)	(3)	(4)	(5)	(6)	(7)	(8)
Pennar Dam Project	10 cents to each family.	..	Free	..	Salvage of construction material of acquired houses allowed free.	..	..	..
	Additional land to a reasonable extent subject to a maximum.	..	On payment of cost - (i) Sites shall not be alienated for a period of 10 years. (ii) Sites for shops to be constructed within 2 years.	..	..	..	..	..
Beas Project	..	..	..	..	Salvage of construction materials of acquired houses allowed free.	Yes.	..	Rs 25 (inclusive of incidental charges) per adult. Half for each child of ages (3-12-years)** Below 3 years -Nil.
Lower Bhavani Canals Project	10 cents to those whose pucca houses were acquired. 5 cents to those whose kucha houses were acquired.	..	Free	..	Building materials supplied at controlled rate.	..	..	..
	An additional area to the extent of 5 cents to families having more than six members.	..	Free	..	Salvage of construction material of acquired houses was allowed on payment of 25% of value of acquired houses.	..	..	Free transport of salvaged material.
	..	..	On payment of cost - (i) The sites and buildings not to be alienated for 10 years. (ii) Sites for shops to be built within 2 years.	..	..	..	..	..

\*\* Transport charges for animals owned by outstees actually and transported were paid on wagonload basis to the nearest rail-heads + Rs 15 incidental charges per large cattle and Rs 2 per sheep and goat.

(Contd.)



## Annexure (Concld.)

(1)	(2)(a)	(2)(b)	(3)	(4)	(5)	(6)	(7)	(8)
Heavy Electricals, Bhopal	2,400 sq feet to 4,800 sq feet.	..	Free (To 107 fami- lies).	..	..	Yes, (Rs 80,000 total loan @ Rs 500 to Rs 750 per family repayable in 20 years).	..	..
Bokaro Steel Plant	Double of the plinth area acquired (as no agricultural land being allotted, (=20 decimals per family on an average).	..	On payment of salami equivalent to cost of acqui- sition.	5 colonies started so far.	Supply of building material on a no profit no loss basis.			
Durgapur Steel Project	..	..	On concessional rates.	One colony	..	..	..	..
Heavy Engineer- ing Corporation, Ranchi.	20 decimals per family.	..	On no profit no loss basis.	..	Supply of building material (Ballas, bamboos, timber, G.I. sheets, iron- rods, bricks, tiles, etc.) at no profit no loss basis from Central Purchase unit organised by the Director, Reha- bilitation.			

**ANNEXURE II  
(Ref. Para 9.54)**

**Government of India directive about the principles to be kept in view by the Boards of Directors and Managing Directors/Chairmen of Public Sector Projects while making recruitment to posts within their projects**

There is technically no restriction in the matter of recruitment to those units based in the areas from which the employees come. It will be of advantage to the units in various directions, if persons who come from areas near about the place of location of the project secure appointment to posts in the lower scales. In the case of all unskilled workers, even without any special effort they are generally drawn from the locality where the project is situated. Every effort should be made in such recruitments to give preference to persons displaced from the areas acquired for the project especially or Scheduled Castes and Scheduled Tribes (e.g., Adivasis). Next should be preferred those who, even if they come from some distance, have been or are about to be retrenched from other Government undertakings.

2. In the case of skilled workers, clerks and other non-technical staff whose scales are comparatively low, so long as the basic qualifications and experience are forthcoming, preference should be given in the order of priority mentioned in the previous paragraph.

3. In the case of the middle level technical and non-technical posts, having higher starting salaries equivalent to the Class I junior scale of the Government of India (Rs 350-850), recruitment should be made on an All-India basis, merit and qualifications being the principal criteria. Complaints have sometimes been made in the past that local candidates do not receive a fair deal. Special care should be taken to ensure that there is no reasonable ground for any such complaint.

4. In the case of higher non-technical posts, e.g., top general management, finance and accounts, sales, purchase, stores, transport, personnel, management and welfare and town administration, carrying a salary of Rs 600 and above, candidates available in the Industrial Management Pool should first be considered. Failing such candidates, there should be

advertisements on an all-India basis. This does not, however, preclude considering candidates who may have applied on their own or may have been retrenched from other Government projects, etc.

5. For the higher technical posts, the best qualified persons will have to be recruited, either by advertisement or an all-India basis or by personal contact.

6. All vacancies of the kind referred to in paras 1 and 2 should be communicated to the Employment Exchanges close to the project. Advertisements, which are made in the papers should be in local languages and in the local newspapers. Such advertisements should specifically mention that preference would be given to persons who are registered in Employment Exchanges. All the applications received along with the list sent by the Employment Exchange should be screened and appointments made by Selection Committees specially set up for the purpose by each unit. These Selection Committees should include representatives from the State Government or their nominees.

7. The Selection Committees set up for recruitment to all other medium level or higher technical or non-technical posts should include at least one representative of the State Government, preferably a State Government official who is on the Board of Directors.

8. Representation for local interests in the shape of a State Government nominee, etc., as detailed above should also be provided for in any standing committee that may exist for the purpose and not confined to only special *ad-hoc* committee.

9. Where the exigencies of work require the making of urgent *ad-hoc* appointments, it will be open to the Managing Director to make such appointments and then inform the Selection of Standing Committees.

The above principles may be kept in view by Boards of Directors and Managing Directors/Chairmen of Public sector Projects while making recruitments to posts within their projects.

# REPORT OF THE NATIONAL COMMISSION ON LABOUR

## CHAPTER 4

### INDIAN WORKER-ADAPTATION TO CHANGE

We have discussed in the foregoing chapters the developments that have influenced the evolution of the personality of the Indian worker. Our Constitution, its Preamble and Directive Principles have provided the philosophy and socio-political framework for economic development. The planning process has facilitated the growth of industry. A labour policy has been evolving through the institutional framework built up for its formulation. Implementation is being gradually improved on the basis of tripartite consultations. Apart from these factors, the impact of political forces and social change is affecting the workers' life. A new worker is emerging within the category of 'industrial labour' with distinct urban characteristics and social mobility. Some of these influences have reached the rural workers also. To record the nature and extent of these changes, we have used the reports of (i) the Study Group on Sociological Aspects of Labour-Management Relations, (ii) the Study Group on Tribal Labour, and (iii) the Committee on Working Conditions of Sweepers and Scavengers, all appointed by us. The impressions gathered by some of us during field visits have also been drawn upon.

#### Industrial Change

4.1 The Indian industrial landscape has changed perceptibly in the last twenty years. Prior to Independence, apart from a fairly extensive network of railways, plantations, mines, cotton and jute textiles, sugar and cement factories, among the more important industrial ventures in the country were three steel plants, with a total capacity of 1.5 million tons of steel ingots, and a few engineering units. Today the complex of industry has changed. Assam no longer means just tea; it means also fertilizers, chemicals, oil refining and distribution, electricity generation and engineering. Nor does Kerala mean cashew processing, coir manufacture and plantations; a prosperous fertilizer and chemical industry is growing up as are petrochemicals, oil refining, and ship-building. The face of Rajasthan is changing; sophisticated industries for the manufacture of ball-bearings, synthetic fibres and electromagnetic and electronic instruments are

coming up. Andhra Pradesh is no longer confined to agriculture and tobacco; it now has fertilizers, chemicals, shipbuilding and other industries. Madhya Pradesh and Orissa too are claiming a place on the country's industrial map. Older centres are diversifying. Bombay, Poona, Surat-Baroda, and their surrounding areas, Hyderabad and its environs, the region around Madras and beyond are all having a greater measure of industrial activity. Kanpur no longer means mere textiles and leather; units, manufacturing, machine tools, transport equipment, aeronautics, plastics and heavy chemicals are coming up. Small scale units in Punjab/Haryana manufacture a wide range of products such as woollen and cotton textiles, steel rolling, agricultural implements, automobile parts and cycles. There is evidence all around to show that many centres of industrial activity are shifting from non-durable goods to durable consumer industries, such as sewing machines, electric fans and radio components. These are symbols not only of increased industrial output, but also of a fair diversification of the industrial structure. On account of the expansion in industries, employment in registered factories increased from 2.9 million in 1951 to 4.7 million in 1966 and in mines from 0.55 million to 0.70 million. In plantations, there has been a marginal change. The number of women in factories increased from 0.29 million in 1951 to 0.36 million in 1966. In traditional industries, their proportion has fallen, but in several non-manual occupations such as in industrial, commercial and trading firms, employment of women has grown more than proportionately.

#### Evolution of Labour Policy

4.2 The main postulates of labour policy operating in the country in the last twenty years could be summed up as follows:

- (1) Recognition of the State, the custodian of the interests of the community, as the catalyst of 'change' and welfare programmes.
- (2) Recognition of the right of workers to peaceful direct action if justice is denied to them.
- (3) Encouragement to mutual settlement, collective bargaining and voluntary arbitration.

(4) Intervention by the State in favour of the weaker party to ensure fair treatment to all concerned.

(5) Primacy to maintenance of industrial peace.

(6) Evolving partnership between the employer and the employees in a constructive endeavour to promote the satisfaction of the economic needs of the community in the best possible manner.

(7) Ensuring fair wage standards and provision of social security.

(8) Cooperation for augmenting production and increasing 'productivity'.

(9) Adequate enforcement of legislation.

(10) Enhancing the status of the worker in industry.

(11) Tripartite consultation.

4.3 The First Plan administered these principles and they were reaffirmed in successive Plans. In giving effect to them in practice, the accent has been on reciprocity and mutuality of obligations and recognition of workers' contribution to production and productivity. A subtle change in emphasis with regard to modes of settlement of disputes in successive Plans is also discernible. Legalistic approach is gradually yielding place to voluntary bilateral arrangements. Strengthening of trade unions to secure better labour-management relations has also been a part of this approach.

4.4 The tripartite consultative machinery formed during the Second World War has now grown into an oft resorted instrument for formulation of labour policy. Though its role is advisory, its deliberations have had a distinctive influence on the policies and the manner of their implementation and in reaching many voluntary arrangements. Labour Ministers get together periodically for reviewing policy and exchanging views on administrative matters. A labour administration machinery, including an elaborate

institutional set-up under Industrial Disputes Act, 1947, has been built up. Wages policy generally has not operated to the disadvantage of the economy, though labour, which is its main beneficiary, has had reason to expect that the policy could have been more liberally interpreted and applied. Other areas where significant developments have taken place in pursuance of the Directive Principles embodied in the Constitution are social security and labour welfare, for both of which new enactments have been passed and old legislation amended to provide for greater coverage and extension of facilities to an increasingly larger number of workers.

#### **Impact of Political and Social Forces**

4.5 Forming of trade unions and the shaping of their activities by the political workers and their philosophy, were not entirely unknown in the past. They have acquired new dimensions with the advent of Independence and the environment which the political system has operated in or has created for itself. Though unions are apparently free from organizational ties with political parties, the association of many unions/federations with politics through ideology and leadership cannot be denied. Such ties have led to fragmentation of unions, to inter-union and intra-union rivalries, and some confusion in the minds of rank and file of workers. Despite the fact that unions have grown in number, the average membership per union is declining. A demand for freeing the unions from political influence is gaining ground and assertions about their autonomous character in relation to their ideological political partners are frequently made. We will revert to this aspect in some detail later.

4.6 A major change on the social side has been brought about by the Hindu Code with its two important components: the Hindu Succession Act, 1955, and the Hindu Marriage Act, 1956. The first gave women equal rights with men in the matter of succession to and holding of property; the second struck at the root of polygamy and provided for divorce with alimony and maintenance. The joint family system is losing its hold, more particularly in urban areas where provision

for social security by the State is encouraging nuclear families; because of the growth of nuclear families, demand for improvement of social security provisions is also gaining in strength.

### Evolution of Industrial Labour

4.7 The Whitley Commission had observed that most industrial areas had grown into multilingual microcosms, diverse in the structure of their population. They consisted of recruits from different parts of the country. The great majority of factory workers were, at heart, villagers because they were born and brought up in the villages. They had village traditions and they retained contacts with the villages and hoped to return to them. But they were not all agricultural workers serving a brief spell of industrial work in the city. The artisan group among the village population sought employment in textile factories, tanneries, railway workshops and other places of urban industry; they looked back rather to village crafts than to village fields.

4.8 Factory workers retained their village connection in the early years for several reasons. They were not prompted by the lure of city life or by any great ambition. Opportunities for employment of women and children in towns were relatively scarce and workers were strangers to the new environment where they could not establish a permanent home. The joint family system took care of the women and children of migrants. The desire for returning to them and retaining interests in the land brought them back to where they belonged. Also the factory worker contrasted the scenes in which he had to live with the memories of his native place and cherished constantly the hope that, sooner or later he could leave the city finally behind. In cities he was in a milieu of strange traditions, or no traditions at all.

4.9 In the years since the Whitley Commission reported, the situation had undergone a change. The Rege Committee observed in 1946 that the working class had become more stabilised and organised. Its ties with villages, which the

Whitley Commission valued and sought to regularise, had been loosened. During this period, there was a greater concentration of working class population in industrial areas and this led to the rise of an industrial proletariat in most cities. Workers were prepared to stick to the town to a greater extent than before, to fight for their legitimate rights and to seek livelihood in urban rather than in rural areas. The growth of population and increasing pressure on land and difficulties in obtaining livelihood in villages were some of the contributory factors. On the analysis of the Rege Committee, 'stabilisation' of labour force in principal industrial cities, therefore, was a matter of compulsion rather than of choice.<sup>1</sup>

4.10 Over the last twenty years, the trend towards the stabilisation of industrial labour has been further strengthened. A worker today is far more urban in taste and outlook than his predecessor. The idyllic notion of a 'village nexus' which found favour with the Whitley Commission, even though it hindered the worker's commitment to industry, has reached to the background owing to the positive measures undertaken in the interest of industrial labour recounted elsewhere. Even in the more distant plantations, settled labour is more in evidence now; in fact, the claims of such labour for employment has been creating a situation needing Governmental intervention in the last twelve years.

4.11 In the past, turnover of labour and casual work were not merely a result of lack of commitment on the part of workers, but also of the employers' reluctance to bear the burden implied in hiring permanent labour. As industry expanded to include a wide variety of skilled and unskilled jobs, industrial work ceased to be the monopoly of migrants from villages. Young persons in urban families traditionally averse to accepting factory environment have been seeking employment there. In most cases, they were positively pulled by the relatively attractive wages and opportunities offered by industry. Nor were urban workers alienated from the community bonds, as

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1. See Main report of the Labour Investigation Committee, 1958 Print, p. 68.

the basic social groups with whom they liked to mix were located near their areas of work. When employers began offering incentives for regularity and productivity, even rural migrants reduced the frequency and duration of their visits to villages. Recent surveys in several industrial centres bear this out. As minimum facilities came to be provided and measures for social security began to be undertaken, workers were increasingly attracted by them and lack of commitment became a less serious problem. Studies on industrial workers in cities like Bombay, Poona, Delhi and Jamshedpur, where the question of commitment has been investigated more recently, show that the earlier migrants have an urge to go back to the village but the later ones show increasing commitment to urban life and factory work. The age of the worker is also a factor, urban attractions working more strongly on the young. This is more or less true in expanding urban industrial centres all over the country. Thus, a vast majority of the workers in cities are committed to factory jobs. In older industries, a second or even third generation of workers has emerged. A self-generating working class with its roots in the industrial environment in which a worker is born and bred is growing in strength.

### **Worker in his Setting**

4.12 The industrial worker of today has acquired a dignity not known to his predecessor. He is no longer the unskilled coolie<sup>1</sup> of the days gone by, engaged in an unending struggle to eke out his existence, neglected by society except for his labour, and with very limited aspirations. He has now a personality of his own. He shares the benefits, albeit meagre, which a welfare state with a vast population and inadequate resources can offer, and some more. He enjoys a measure of social security; he is secure in his employment once he enters it; he cannot be dismissed unjustly and has been given statutory protection against retrenchment and lay-off. All this, however, does not mitigate his worries about the future of his dependents, the employment situation in the

country being difficult. In the days since Independence, there has been a continuous rise in his money earnings. Several new amenities are a part of his working life both because of legislation and also because the conditions of the new industries require the provision of these facilities. Increase in money earnings has not been without struggles nor has it necessarily improved his standard of living.

4.13 With the changing industrial landscape of the country, growth of new industrial townships and dispersal of activity, a process of industrial 'culturisation' of working class has set in. New working class areas have come into being and old ones are expanding. In the new areas, adaptability of this culture naturally depends on the extent and strength of the workers' links with rural mores. Yet, assimilation with a new way of life has not been necessarily slow. Our observation visits have revealed changes in workers' day-to-day life and these we consider worth recording. Though somewhat impressionistic and lacking in quantitative precision, they are borne out by the writings of a cross-section of social observers of the Indian scene as a whole. We may start with understanding changes in the workers' basic requirements.

4.14 **Food:** The consumption pattern prevailing in a worker's home at many centres shows evidence of significant change. Readymade food is more common than in the past. Bakeries have thrived; they have reached areas in which use of wheat and wheat products was restricted to the higher income groups. New food habits have been brought about no doubt by the pattern of availabilities in the country. High prices of some commodities have pushed down their consumption. Change in the consumption modes is reflected even in the manner of cooking. As wheat preparations are finding place in South Indian kitchens, rice preparations common in the large industrialised centres have become more cosmopolitan than before. The role played by subsidised industrial canteens, where they exist, has not been inconsiderable. Cooking media have changed and so have fuels. Charcoal, kerosene oil

1. The term 'Coolie' is now banned for official use.



and pressure stoves are slowly making their appearance replacing firewood and cow-dung cakes. Electricity and gas are not only within the worker's aspirations, but also in actual use though among the relatively better off workers.

**4.15 Clothing:** Sartorial changes are no less in evidence. The traditional pre-Independence dress made out of cloth rough in texture is making way for neat shop-floor working dress. A worker can now afford medium and fine varieties in clothing. He also has spare clothes to wear when away from the work environment. He prefers trousers and pyjamas to his traditional apparel. Foot-wear a sign of affluence in the past, has now become a necessity. These changes have in turn affected the clothing habits of women. They have taken to readymade garments. Man-made fibres are a common ceremonial wear. They want their children appear smart.

**4.16 Housing:** The working class house-tenement has not escaped the changes either, though in many industrial areas, workers still live in single room tenements in unhygienic surroundings. They consider their efforts to improve these so unrewarding that a sense of resignation has developed. In some centres, by sending their representatives to civic bodies, they have been able to get their grievances redressed to the extent the finances of the local authorities permit; and these are slender by any standard. The *dowrahs* in the coal mines, the *ahatas* of Kanpur, the *labour camps* in Bombay, *shanties* of the South and *basties* in the eastern region have not materially altered in their appearance; if anything, they are uglier than before and more crowded. New constructions which have come up are already showing signs of overcrowding. In many new private and public sector undertakings which have sprung up in industrially virgin areas, the more fortunate among the workers are provided with good company housing; but compared to the total number of industrial workers in the country who required to be housed, the number of those who are thus housed is small. The Subsidised Industrial Housing Scheme for factory workers and welfare funds for workers in coal mines, mica mines, plantations and docks have attempted to

provide improved housing. But the number of houses thus provided is small. The progress in both cases has been slow. Then there are innumerable small undertakings in the industry, mining and plantation sectors which just cannot afford to house their workers. And they are a source of major concern to the authorities. On construction sites, and in the last twenty years construction activity has grown in importance, the situation is even more intolerable. But even in this dismal surrounding, the worker endeavours to keep himself clean. Real change is seen inside the tenement. Earthen pots have been replaced by aluminium or brass-ware; pieces of crockery are not an unusual possession. There are also items of furniture, such as *charpoi*, a bench or a chair and mosquito net. Radios/transistors/watches are often the proud possessions of not a few.

**4.17 Miscellaneous:** Entertainment has assumed a different form. 'Secularisation', a by-product of industrial culture, now informs workers' activities outside the place of work. Religious plays and *bhajans* have been replaced by dramas with a distinct social content. The religious tone of ceremonials such as birth, marriage, and death is subdued. Competitions, indoor and outdoor games, and lectures on political themes attract workers. There is more community participation in recreation than before. A child is no longer looked upon as a gift of God and family planning is not shunned. A worker is conscious that it is a safer proposition to invest in the betterment of a small family than to spread his earnings too thin over a larger one. He is now accustomed to get himself treated for his ailments. The contribution he gives to the Employees' State Insurance Scheme has made him conscious of them and the treatment he receives. We came across several instances, where workers demanded injections or a specific brand of medicine when the doctor had prescribed something else. They consider this demand a part of the return for their contribution. Industrial diseases, for various reasons continue to harass workers, especially in the mines, despite preventive measures. Though on contracting a disease a worker is entitled to compensation under the law, the fear of losing his job on being declared

medically unfit on this account discourages him from seeking early treatment and undergoing a medical check-up.

4.18 The process of urbanisation has in turn led to difficulties in three other areas: (a) transport, (b) civic amenities and (c) distribution controls. We now refer in brief to these aspects.

4.19 **Transport:** The distance between the place of stay and the place of work is an important factor which affects work attitudes. Where workers reside far away from the factory, the irritation of travelling in overcrowded buses/trains is reflected in their efficiency. The time spent in waiting and travel to and from the place of work also eats into hours available to the worker outside the factory. Owning a modest conveyance is common in many centres where distances are manageable, but impracticable in others where the industry is concentrated and residential areas are far-flung. Some employers provide subsidised conveyance for workers or offer to contribute to the purchase of season tickets but these practices have yet to gain wider currency. Housing and transport often constitute a joint problem to be tackled. To stay near the place of work in established industrial centres is to continue in slums. Housing within the walking distance of areas of work becomes prohibitive in rent because of the cost of land on which they have to be built. To move away means facing transport difficulties.

4.20 **Civic Amenities:** Among civic inconveniences which workers have to put up with lack of sanitation is the most important. Insanitary environments seriously affect workers' health and impair their efficiency. There is growing pressure on all sanitary services in urban centres. Industrial waste and effluents add to this pressure. In some areas, municipal authorities have been unable to catch up with the requirements of industrial development. Educational and health facilities lag behind. Street lighting is inadequate. These inconveniences have been creating difficulties between employers and workers. The

insistent demand from workers for a separate township, wherever feasible, is matched by the employers' inability to meet it.

4.21 **Distribution Controls:** Workers complain that considerable time and energy are wasted in conforming to Governmental restrictions on distribution of essential commodities, which indeed are common to the community as a whole, because of shortages developing in the economy. Loss of energy was a point of complaint even in the early days; but to it has now been added consciousness about loss of time. One can see in any city queues of workers for purchasing rice, fish, cooking medium, kerosene, sugar and the like. On occasions, even a long wait in the queue does not produce results. These disappointments which are also shared by his family members materially condition the worker's attitude to work.

#### **The new worker**

4.22 The social composition of labour is undergoing a change. Labour is not restricted to certain castes and communities. Apart from the fact that caste and occupation have always inter-acted and the relation between the two has been 'elastic' in our society, social mobility today accounts for the emergence of a mixed industrial work-force. While in traditional industries this change is slow, one cannot escape noticing it in sophisticated employments such as engineering and metal trades; oil refining and distribution; chemicals and petrochemicals; machine tools and machine building; and synthetics and in many white-collar occupations. The background of the intermediate and lower cadres in the latter industries is overwhelmingly urban; their level of education is higher. They come from middle or lower middle classes comprising small shopkeepers, petty urban landlords, lower echelons of public service and school teachers and professional groups. They have a pronounced polyglot character.

4.23 The old social barriers are breaking down. It is now common to find the son/daughter of a spinner or a weaver working side by side in a chemical or a pharmaceutical factory with the son/daughter of a person of an earlier generation for whom factory or mill work except in clerical or supervisory categories was taboo. The old distaste among certain groups for manual work is gradually wearing off, because the groups themselves have not retained their separate identity as of old and because jobs are no longer wholly manual. The impact of this change is seen not only at the place of work, but also in homes where earning members have established parity with seniors in the family and seek and reciprocate social calls from colleagues in the place of work. At one time, income levels divided the working class and the middle class; status consciousness was dominant. The sharp line that used to divide the worker from a clerk is now visible no longer.

4.24 Higher skills and educational requirements expected of workers in modern factories and better wage levels consequent on them have tended to blur further the traditional distinctions between manual and non-manual workers. The social and political climate in the country has had its own effect on the process. Against the background of a rising tempo of industrialisation, the society has acquired a better sense of dignity of labour, though some trades like scavenging and tanning where the work is disagreeable still continue to be performed on a hereditary basis and are looked down upon. The demand in their case is that the society should help in making these trades less 'unclean'. Workers, on their part, are shedding their own complexes. Whatever the reasons, there has developed a greater sense of equality among workers *inter se* and also as between the supervisory group on the one hand and workers on the other. In fact, workers in some industrial townships are getting conscious of the distinction shown between workers and other staff in the matter of company transport or medical and recreational facilities. As more and more workers send their children to school and college, instances where the children of factory workers

come out as engineers, doctors, accountants and teachers are on the increase. All these have contributed to a kind of social amalgam.

4.25 The sex composition of workers has shown a change. Women workers, often educated, take to skilled and semi-skilled work in modern factories. In the pre-Independence era, women in the industrial labour force, leaving aside plantations, were mostly confined to the textile industry. They were generally illiterate and they came from the so-called 'labour classes'. Young girls from middle class families, who not so long ago would have shied away at the thought of working in factories, are now taking to factory environment in increasing numbers. Old inhibitions are breaking down, though slowly. In some cases, it is the economic compulsion which makes them take to work, but in several others it is the desire to improve their standard of living and to possess 'extra' goods that drive both husband and wife to work.

4.26 Use of child labour has declined, but it still survives in some employments. Its incidence varies from place to place. It is noticed mostly in agriculture, plantations and shops and in the small-scale and unorganised sectors; it is not entirely absent even in the organised sector of industry. Children are still employed in the mica mines though their proportion to the total now is much less than what it was in 1944-46. The way child labour is used in the unorganised sector is still disturbing. In every case where weavers work with master-weaver, the weaver has on hand a child of school-going age to help him. The child's education is no concern of his immediate superior, or for that matter, the master-weaver. The children are not the employees of the master-weaver, but they help the employee and collect whatever money they can get from him. In carpet weaving in most parts of the country and in *bidi* industry everywhere, 'catch them young' seems to be the rule.

#### Aspirations and Attitudes

4.27 A worker today is better aware that learning is essential for improved earning. He is

keen about self-education at adult literacy centres and even more keen about the education of his children and their future. He wants them to enter more remunerative avenues which were denied to him because of requirements of skill. And this aspiration is not confined to the urban workers; it has travelled to rural areas but not to the too distant among them. It is a welcome sign that the worker, along with the rest of the community, is forward looking. Over the last twenty years the aspirations of workers changed mainly because of the induction of a large number of young workers in the working force. Some of the workers' aspirations are the result of the social consciousness referred to earlier; others have arisen out of what they see around them. The role of political parties and trade unions in making workers conscious about their surroundings has been no less significant.

**4.28** It is necessary to view the change in attitude in its components; the worker's attitude to work; his attitude to the union and the issues connected with his organisation; his attitude to persons with whom he has to come in contact outside his work place; and also his attitude to his employer and the shop-floor superior.

**4.29 Attitude to Work:** It is a part of the worker's make-up that he does not generally mind the nature of work that falls to his lot. For instance, a worker in a tannery or in a sewer has to live with the obnoxious odours associated with the work; so has a worker in a steel plant or a deep mine with the temperature to which he is subjected. A worker in the weaving shed gets used to the noise and humidity around him. He considers that it is in the nature of the job to put up with such inconvenience; he gets conditioned to it that it is no serious inconvenience to him any longer. Inter-industry and inter-trade disadvantages in conditions of work, including wage rates, do not usually affect his attitudes. When, however, it comes to a question of convenience outside the work-place, the worker is certainly anxious to work for a measure of equality.

**4.30 Attitude towards Unions:** As stated earlier, a worker today is more politically conscious than before, more articulate in his criticism of the existing order and more sensitive to his conditions and hardships. He has participated in political and constitutional processes of elections. Though it must be said to his credit that by and large he has not reacted violently to the passions of certain local communities based on language, region, caste and religion which have raised their ugly head in recent times in some regions, one need not infer that he has remained untouched by these cross-currents. Workers turn to the union for fulfillment of their aspirations. Their own participation in union activities may be marginal because of their pre-occupation, but they do not hesitate to avail of the services of their union when in need. When it comes to choosing the union to which they should belong, the consideration at the back of their mind is to support the one which can deliver the 'economic goods'. Thus, cases do occur where workers may differ from the union leader on political issues, but may still vote him to the union office, if they find that he is the right person to bargain with the employer.

**4.31 Attitude to Outsiders:** A worker is not too worried whether his leader is an 'outsider' or an 'insider' or what the definition of the term should be. To him, a person who has the workers' cause at heart is as much an 'insider' as the operative who works on a neighboring machine. The question is again who can deliver the goods. All he looks for in the leader, therefore, is sympathy for the cause and capacity to put across his grievances to the employer. He is prepared to pay for services which the union is able to offer. It may be a cause which is of direct economic interest to him or for welfare activities, but more for the former than the latter.

**4.32 Attitude towards Employer:** In considering this issue, we take note of the allegation made by some employers that the worker of today shows a greater measure of defiance to his superiors. This new attitude has been attributed by some to the security that the worker has acquired through favourable legislation. We believe that in all such assessment, one is apt to

ignore the general atmosphere that has developed in the country, particularly in its urban part and in the younger generation in the last few years. There is a certain degree of restiveness in the country which is a complex of many factors. It is more acutely felt by those who are at the growing point of change and who have been shaken out of the grooves rather than by those who have remained static. Such tensions will be more noticeable in a worker who has to carry out instructions than in a person who is self-employed. It is accepted that not all his worries are employer-based not for that matter are the problems which the employer and his officers face all along the line necessarily worker-based. If the raw material is not of the proper standard and spare parts are defective and the supervisory staff helpless in the matter, irritations are caused and indiscipline can result. This is not to suggest, however, that this is also the major cause. There can be certainly cases where one side or the other is directly responsible.

4.33 In understanding the significance of the attitudinal changes in workers to industrial relations, it is important to record the changes on the other side of the bargaining table also. Over the last twenty years, the handling of labour-management relations is getting increasingly professionalized, though this is not to suggest that such professional handling by itself is adequate. Thus, the institution of personnel managers and professionals, though necessary, is not sufficient for industrial harmony. Persons who are drafted for work in these capacities belong socially to the same group to which the union leaders belong. It has been the recent practice for them to discuss on a common platform issues which promote industrial harmony. While the views the personnel managers publicly hold about labour are the employers' views, they seek and are expected to emphasise the workers' view-point within the management as an organisation. Their standing in the organisation will naturally depend upon the personality of the members constituting high level management, but by and large, it could be said that they have served as a good link between

employers and workers though very often workers have expressed dissatisfaction about the manner in which they have functioned.

4.34 Disputes between employers and workers have been taking a legalistic orientation of late, mainly because of the emphasis on adjudication by industrial tribunals and courts. Added to this is the tendency of employers to go in appeal; recourse to appeals is not entirely unknown among unions either. Employers can engage lawyers and, to match them, unions have persons with legal acumen on their executive. As a result, both get legalistic in their approach. Sometimes litigious attitude on the part of employers and workers creates situations in which the employers gain because implementation of awards is postponed and lose because the disputed issues pending before courts unsettle workers and inhibit them from improving production.

4.35 **Social Attitude:** Basically, because the worker has not yet reached a standard which he considers satisfactory, his inclination would be primarily to struggle for his rights though he need not be unmindful of any public cause. He does require in his own struggle the sympathies of others. His attitude towards the State is conditioned by the attitude of the State to his problems. We discuss these connected issues in a later chapter.

4.36 We now consider in two parts the changes which are taking place in unorganised labour and labour which at present has little or no protection. The former covers labour in small-industries. The term 'small-industries' is used in a generic sense to connote labour in small industries, casual/contract labour and a host of other categories of urban labour. In the latter we refer, in brief, to rural labour only.

### **Worker in Small Industry**

4.37 In the years since Independence, small industries have been encouraged as a matter of policy. Side by side with this desirable aspect of policy which throws up new entrepreneurship, one also finds many small scale employers who

have made labour legislation the main target of attack in public and followed it up by non-observance or evasion in practice. They speak the language of a big employer, use the services of lawyers in the same manner as other employers do, and are prepared to face the wrath of union leaders, knowing well the weakness behind this wrath. Their method is crude splitting of larger units into smaller ones only in name. Signboards dividing a unit in two or more parts even within the same premises are not unusual, particularly in handloom and powerloom factories and small engineering units. An employer who has become an entrepreneur from small beginnings and wants to limit his commitments genuinely to avoid labour legislation and attract facilities meant for the small man may evoke some sympathy; but a deliberate splitting of factories to avoid social or economic legislation falls in a different category. It is in this context that labour conditions in small units have to be viewed.

4.38 One would expect that, by and large, the Factory Inspectorate would be a helpless spectator in cases where the size of the establishment is small. In these cases, other factory legislation is also made ineffective and so would be voluntary instruments which have developed in the last ten years for providing extra legal relief to workers. Union leaders find the task of organising such workers frustrating. Industrial life in these units, however, goes on without much overt difficulty. A worker who does not like the ways of his employer will try to acquire skills as early as possible and either develop entrepreneurship of his own and quit the labour market, or float on it in his quest for a new employer. The market for skills not being saturated, he finds work. Those who remain have to rely on the employer's benevolence towards them. With the rapid growth of small industries and the difficulty in organising labour, many unfair labour practices, to the disadvantage of labour, thrive. Apart from the easy escapes which the employer seeks, one notices cases of non-implementation of the Payment of Wage Act, 1936, even where it is applicable. In many cases, workers are paid advances by employers in seasonal factories. Because of illiteracy among workers in the early years under

review, workers experienced difficulties in understanding how the accounts were settled at the end of the year, but this practice is now on the wane. Statements of this type from union leaders tend to be exaggerated, but the existence of the practice cannot be ignored.

4.39 Labour has taken the employer to a tribunal in several cases. After protracted proceedings in which labour is more likely to be tired out, an award is secured. An employer who believes in denying the benefit to workers and is smarting under an award, which he thinks unjust, places on the award an interpretation more favourable to himself and litigation continues under a different garb. Such protraction of legal relief leads to contracting out of a benefit duly secured and even disowning of the labour leadership which struggled for it. Thus, where no redress is available except through a tribunal, there can be no guarantee that a worker in a small unit will gain even after persuading the tribunal of the reasonableness of his demand.

#### **Rural Labour: Tribal**

4.40 The emergence of tribal labour in a sizeable proportion for industrial work is an aspect which is acquiring significance in the country. The process started with the exploitation of forest wealth and minerals like mica, coal, iron ore and manganese towards the end of last century. It gathered momentum since Independence with the location of factories in what were considered traditional tribal belts and with intensive exploitation of forests and minerals. The first consequence of the changes is 'urbanisation' of tribal areas. The 1961 Census showed a significant increase in the population of towns and cities in these areas. With all the consequences of the type referred to earlier, though on a smaller scale, isolated homogeneous 'adivasi' communities which looked to agriculture for sustenance found their lands being acquired for industrial use and a new environment being built with substantial investments flowing in. With such monetisation in the area, the traditional institution - the tribal panchayat - could help them no longer. Those who still continued to till their lands had to diversify

their crops to suit the needs of a growing industrial centre. The tribal youth who managed to get absorbed in non-agricultural employment gradually changed his way of life. This had a multiplier effect. Families uprooted as a result of their lands being acquired for developing industrial complexes were no longer satisfied with the compensation received. They wanted the younger among the members to be absorbed in industrial employment. This demand is reasonable though it adds another dimension to the planning problems of a unit from which entrepreneurs of earlier generations were relatively free. What was a rule in those days has become an exception today. Only a small number of tribals have left the sites acquired for a different use and moved to distant villages where they have settled down as agriculturists and continued their vocation; a larger number, mostly from the younger groups, want a reorientation of their working life.

#### **Rural Labour: Non-Tribal**

4.41 Over the years, the profile of the agricultural worker has perceptibly changed. He has been involved in political processes of elections to Panchayats and the highest elected bodies in the country and also in development programmes. He is politically conscious. His children have benefited from the provision for compulsory primary education, though in several cases, the benefit becomes illusory. His aspirations are higher than before; he is responsive to the opportunities for change and development. In areas covered by intensive agricultural development programmes, where the new farm strategy is being put to use with its consequent benefit to the agriculturist, his earnings both in kind and cash show an increase because the wage rates have improved and employment opportunities are available in a fair measure as a consequence of multiple cropping. Agriculture is being organised as an industry and agricultural operations are becoming sophisticated. The increased yield has had its effect on the marketing of the product and ancillary employment it generates. While some advantages have accrued to labour, its capacity for taking

advantage of these new opportunities is limited by its bargaining power and this depends upon a host of factors including land reforms.

4.42 Drift to urban areas continues, especially in the younger among them. Attachment to land and the rural way of life, so common with the village elders, do not hold the same fascination for the village youth. There is some restlessness, among those who aspire to migrate, about the slow pace of development of non-agricultural work. Landless labour acquires the status of industrial labour through the process now familiar. Workers migrate to the site of a developmental project during its construction phase, having been recruited by the work-contractor either in their village homes or at site, and labour under arduous conditions. On completion of construction or even earlier, several are turned out, but others find employment with the same contractor in building new projects. The fortunate few who secure employment of a permanent nature through this process of waiting have no regrets over the trials and tribulations they have had to undergo. The security of their job thus assured, they go through the same process of changes as described earlier.

4.43 The beneficiaries of these developments are only a small section of agricultural labour, and that too, near the places where development is taking place or communications are established. Several others who have to stay in areas far away have to depend upon such meagre share of the over-all progress in the country as they can claim. To help them is not so much an aspect of labour policy or programme as of more rapid development of the economy.

### **CHAPTER 15**

#### **WAGE POLICY-ASSESSMENT AND ISSUES**

In all countries, wage policy is a complex and sensitive area of public policy. This is because the relative status of workers in the society, their commitment to industry and attitude towards management, their morale and motivation towards productivity, their living standard and, in

fact, their way of life are all conditioned by wages. Hence, a policy dealing with this crucial problem cannot be simply economic, as it has to reckon with the realities of multidimensional social phenomena, in which besides the worker and the management, the consumer and the society at large, and in consequence the State, are all vitally interested. Wage policy is a determinant of the shares of the rival claimants of the product of industry and national dividend, but there may often be a conflict between its short run and long run objectives as well as between private and social interests. There are, of course, theoretical generalisations or principles that may provide scientific guidelines for framing a wage policy. Equally important in this context are the concrete social facts that must be taken into account in its formulation at any given time. No principle of wage policy can ever be applied in vacuum and in disregard of the realities of a situation. Wage policy has to be pragmatic, though it does not follow that it has to be unscientific and remain simply a matter of expediency.

15.1 In well-organised and developed economies, inter-relations between wages and other factor prices can be worked out on *a priori* considerations. In others with a large measure of regimentation, dogmatic solutions can be enforced. But in an economy in the process of development and with people wedded to democratic institutions, the difficulties in framing a wage policy are manifold. It is in this setting that we have to view the various issues connected with wage policy in our country.

### Early history

15.2 For a long time, *laissez faire* operated in dealing with wage problems. But the beginnings of third party intervention are not all that recent as is popularly believed. Without Government being brought in, settlement of wage demands through third party intervention was accepted in Ahmedabad as far back as 1918 at the instance of Mahatma Gandhi, *Ad hoc* enquiry committees, without statutory backing, for settling specific

wage issues were not unknown either. Government's intervention in the field of industrial relations came with the Indian Trade Disputes Act, 1929; and in early days such intervention was mainly for regulation of wages. The Whitley Commission which reported later, apart from giving a factual account of wage levels in different industries, referred to questions connected with minimum wages, standardisation, inter-sectoral wages and incentives, and suggested surveys for collection of wage data. It recommended a minimum-wage fixing machinery of a wage board type for industries satisfying certain criteria laid down by it. These included *prima facie* establishment of a case for Governmental intervention, as much as feasibility of enforcement, including the cost of such enforcement. Legislation was also hinted at if the need was proved. That Commission was, however, more concerned with the problem of payment of wages. Unfair deductions seemed to be the rule then, and special measures were needed to check them. A direct result of the emphasis in the Whitley Commission's report on unfair deductions and the need to check them was the passing of the Payment of Wages Act, 1936. Among other observations of that Commission we would like to point out one which holds good even today. The Commission felt that the problems of wages of the industrial workers should not be considered in isolation; the prosperity of the industrial workers and the community would have to advance simultaneously. In this regard it observed:<sup>1</sup>

Indian industry is not a world in itself; it is an element, and by no means the most important element, in the economic life of the community. Care must be taken, therefore, to ensure that, in adopting measures for the betterment of industry or of industrial workers, the interests of the community as a whole are not overlooked.

15.3. There were no significant developments in the field of wage policy consequent on the Whitley Commission's report. But towards the end of the thirties, *ad hoc* committees were

1. Report of the Royal Commission on Labour, p. 211.



appointed for settling the wage structure in some Provinces. Active Government intervention started on an all-India basis only during the Second World War. Additional payments in the form of dearness allowance to workers for rise in prices and a share in war-time prosperity through bonuses became more commonly accepted than in the past. The Rege Committee which surveyed the position prevailing at that time felt that in the matter of wage fixation the guiding principles, if any, appeared to be in favour of maintaining the *status quo ante*. It felt that the practice of thinking in terms of short term gains without adopting a scientific attitude in regard to wage fixation would be in the long run detrimental no less to labour than to industry. It also referred to the difference in the levels of wages in agriculture and in industries and observed that such differences should not be over-emphasised; they could be partly justified because of the conditions under which the industrial workers were made to work and live. The fact that agricultural wages were low could not be a justification for keeping industrial wages low as well.<sup>1</sup> The 1946 Programme referred to the following three elements of wage policy which are equally relevant today:

- (i) 'the statutory prescription of minimum wages in sweated industries and occupations and in agriculture',
- (ii) 'promotion of "Fair Wage" agreements', and
- (iii) 'steps to secure for workers in plantations, a living wage'.<sup>2</sup>

### Policy Statements since Independence

15.4 The next significant event of the period was the adoption of the Industrial Truce Resolution (1947) which was an aftermath of the industrial unrest immediately prior to and after Independence. The relevant portion<sup>3</sup> of the Resolution states.

...The system of remuneration to capital as well as labour must be so devised that while in the interests of the consumers and the primary producers excessive profits should be prevented by suitable measures of taxation and otherwise, both will share the product of their common effort after making provision for payment of fair wages to labour, a fair return on capital employed in the industry and reasonable reserves for the maintenance and expansion of the undertaking.

15.5 The Industrial Policy Resolution (1948) emphasised *inter alia* its intention (a) to fix statutory minimum wages in sweated industries and (b) to promote fair wage agreements in the more organised industries. To facilitate the former, the Minimum Wages Act, 1948 had already been passed. For the latter the Government appointed the Committee on Fair Wages (CFW) 'to determine the principles on which fair wages should be based and to suggest the lines on which these principles should be applied'.

15.6 The CFW defined three distinct levels of wages, viz., living wage, fair wage and minimum wage. The 'living wage', according to it, represented a standard of living which provided not merely for a bare physical subsistence but for the maintenance of health and decency, a measure of frugal comfort including education for the children, protection against ill-health, requirements of essential social needs and some insurance against the more important misfortunes. The 'minimum wage' was to ensure not merely the bare sustenance of life but the preservation of the efficiency of the worker by providing some measure of education, medical requirements and amenities. It envisaged that while the lower limit for 'fair wage' must obviously be the minimum wage, the upper limit set by the capacity of the industry to pay. Between these two limits the actual wage would depend on (i) the productivity of labour, (ii) the prevailing rates of wages, (iii) the level of national income and its distribution,

1. Report of the Labour Investigation Committee, pp. 271-72.

2. The term 'living wage' used here is not the same as 'living wage' used by the Committee on Fair Wages. It amounts to minimum wage only.

3. Tripartite Conclusions-1942-47, p. 284.

and (iv) the place of the industry in the economy of the country.<sup>1</sup> In the actual calculation of the fair wage, the CFW observed that it was not possible to assign any definite weights to these factors. The wage fixing machinery should relate a fair wage to a fair load of work and the needs of a standard family consisting of three consumption units inclusive of the earner. The capacity of a particular industry in a specified region should be taken into account to determine 'the capacity to pay' and this in turn could be ascertained by taking a fair cross-section of the industry in the region concerned. The Committee recognised 'the present level of our national income does not permit of payment of a 'living wage' on standards prevalent in more advanced countries'. But, according to it this should not preclude the fixation of fair wages on different and lower standards. 'At almost any level of the national income, there should be a certain level of minimum wages which the society can afford; what it cannot afford are minimum wages fixed at a level which would reduce employment itself and thereby diminish the national income'.<sup>2</sup>

15.7 The CFW recognised that the concepts laid down by it could not be viewed in any static sense; they would vary from time to time, depending on the economic and social developments in the country. The principle that luxuries of today become necessities of tomorrow was implicit in this recognition. These recommendations have exerted considerable influence on wage fixing authorities in the period under review.

15.8 To give effect to the recommendations of the CFW, the Fair Wages Bill was introduced in the Constituent Assembly of India (Legislative). Though it was not enacted, the then Prime Minister, the late Shri Jawaharlal Nehru, stated in the Parliament in April, 1950: 'Government are committed to the principles of fair wages as recommended by the Tripartite Committee'.<sup>3</sup> The bill lapsed after the dissolution of the Constituent

Assembly. It was not pursued in the Parliament later. The Constitution of India which was adopted in November, 1949 included the securing of a 'living wage' to workers as one of the Directive Principles of State Policy.

15.9 An important development at about this time was the setting up of the First Pay Commission (1946-47) which examined and reshaped the salary structure of the Central Government employees. The principles of wage fixation enunciated by that Commission and accepted by Government influenced the wage fixing authorities when they dealt with cognate issues. It would also be not incorrect to state that the Pay Commission was itself influenced by what was happening in the field of wages and salaries in non-Governmental employment. It is possible that this aspect of inter-relationship will continue to have an impact on any policy leading to remuneration for work.

15.10 The First Plan, while cautioning against a general upward movement of wages which would set in motion a wage-price spiral, recommended that wage increases should be granted mainly to remove anomalies or where the existing rates were very low. It also recommended restoration of the pre-war levels of real wages as a first step towards the 'living wage' through increased productivity. Factors like the need for reduction of disparities in income, the distance which wages of different categories of workers had to cover before attaining the living wage standard, the need for standardisation, and maintenance of wage differentials at a level necessary to provide incentives were suggested for being taken into account in making wage adjustments. These features were re-asserted in the Second Plan, but a shift in emphasis was introduced; it required that improvement in wages should result mainly from increased productivity brought about not merely by more efficient work on the part of labour but also by better layout of plants, improvements in management practices and the

1. The Report of the Committee on Fair Wages, p. 10.

2. The Report of the Committee on Fair Wages, p. 3.

3. Indian Parliamentary Debates, Vol. Part II - April 20, 1950, Pp. 2,973-74 (Statement regarding Bill relating to Fair Wages).

like. A wider application of the system of payment by results, subject to safeguards like fall-back wage, protection against fatigue and undue speed-up, was envisaged. But the more significant contribution of the Second Plan was its recommendation that for settling industry-wise wage disputes tripartite wage boards which gave the parties themselves a hand in shaping the wage structure would be more appropriate. Two other developments in this period which deserve special mention are: (i) the recommendations of 15th Indian Labour Conference in regard to the need-based minimum wage, and (ii) the report of the Second Pay Commission in respect of Central Government employees, whose recommendations about the need-based minimum wage created a public controversy.<sup>1</sup> The Third Plan generally endorsed the recommendations made in earlier Plans in regard to minimum wage fixation, reduction of disparities, wage differentials and the like, but brought into sharper focus the role of productivity in improving the living standards of workers. It observed 'neither the exercise of their organised strength in industrial conflicts, nor laws and the intervention of the State can help the workers much in realising their aspirations. Their gains can arise only out of the strength and dynamism of the economy, the only enduring basis of which is a rising level of productivity.'<sup>2</sup> Thus, while the policy in regard to wages as enumerated in the Plans remained more or less the same in its essential features, a shift in emphasis towards productivity in recent years is discernible.

### Indicators of Assessment

15.11 Every aspect of wage policy cannot be evaluated in this section nor is such an evaluation called for. Some aspects, however, figure in the detailed analysis in the following chapters. What is attempted here is an assessment of the general wage policy, and in this, the first task is to identify the indicators for such evaluation. This is not easy since different indicators may not necessarily lead to the same conclusion, while firm data may not

be available for some. We have, therefore, chosen the indicators which are intended to provide an overall view and tried to make our assessment as reliable and practicable within the limitations of the data available to us. The indicators selected by us are: (i) the state of industrial harmony; (ii) the changes in workers' level of living; (iii) changes in productivity; (iv) the impact of wages on prices; and (v) the share of wages in the value added by manufacture.

15.12 **Industrial Harmony:** An index of industrial harmony is the number of man-days lost owing to industrial disputes. Although the break-up of the total time loss is not available according to the causes of disputes for the whole period, it would not be unreasonable to assume that the trend in time loss would be considerably influenced by disputes relating to wages and cognate issues as they constitute nearly 40 per cent of the total number of disputes even now. An appraisal of the trend in man-days lost over the period shows that the loss was maximum between Independence and the First Plan which also happened to be the period when the real earnings of industrial workers were below the 1939 level. On an average, 11.3 million man-days were lost per annum between 1946 and 1950. The improvement in real wages brought about in the years of the First Plan seems to have had a salutary effect on industrial harmony; the loss was on an average only 3.9 million man-days per annum. More than the absolute level of earnings, it appears that it was the rate of improvement in real earnings which was significant. Between the Second Plan and the first four years of the Third Plan, for which we have reliable data, real earnings have been falling. The time loss was higher than what was witnessed in the First Plan, but much below that in the years prior to 1950. Provisional figures on real earnings for the two years thereafter show a confirmation of this down-ward trend. The spurt in price level in 1967 eroded the real wage further. The years 1966 and 1967 saw a deterioration in the industrial harmony with the time loss per annum averaging much higher than in the years between 1956 and 1965.

1. In view of the importance of these issues to our work, they have been discussed in detail in the next chapter.

2. Third Five Year Plan, p. 261.

15.13 For a realistic appreciation of the industrial relations situation, it is not enough to study only the trend in time loss over a period of years. It has to be related to the time worked. On this we do not have reliable information to come to a definite conclusion. However, a part of the increased time loss could be attributed to the number of new units established in recent years and the consequent increase in industrial employment and improvements in the methods of reporting man-days lost. Taking these factors into account, we feel that loss of production through wage disputes is not that significant. This statement should not be interpreted to suggest that we are indifferent to the possible effects of work stoppages on production, nor do we wish to minimise the serious consequences of a work stoppage in a key sector which results in indirect production loss elsewhere.

15.14 **Levels of living:** The level of living is a function of real wages. It has been urged before us by the workers' representatives that the industrial relations machinery set up by the Government to settle wage disputes worked in such a manner as to result in a restraint on wages. This has been so on account of the time taken in the judicial process or by the tribunals in giving wage awards particularly when these were extended beyond their original period of application. While it is not possible to say what the precise impact of this aspect on levels of living has been, taking the period 1947 to 1966 for which data have been analysed in the last chapter, it would appear that real wages after a rise in the period 1947 to 1955 (reaching in the process the 1939 real wage level in 1952, and improving upon it thereafter) have been declining subsequently. Part of the real wage increase between 1947 and 1955 was fortuitous because of a fall in living costs. The net effect of the operations of the industrial disputes machinery on wages of factory workers has been that in 1965 the industrial workers at the lower levels were earning hardly a real wage corresponding to that of the year 1952. Evidence from the side of labour has emphasised this fact. Some independent researches also corroborate this fall in real earnings. Wages of coal

miners, however, have consistently improved since 1956. But this improvement is due to the initial low level of wages at which the miners worked prior to 1956. In plantations, the situation appeared to be somewhat better than in the case of factory establishment. In ports and docks and in some sections of white collar employments, workers did secure gains. On the whole, between 1952 and 1965, while per capita real income has improved, the real wages of workers have, with few exceptions, at best not fallen. But the situation has deteriorated since 1965-66 due to a further rise in living costs.

15.15 **Changes in Productivity:** Labour productivity and changes therein are difficult to measure and there are no reliable indices available in this respect. A few independent researches in the field in specified industries have generally been limited by the assumptions made and lack of availability of data and precision in operational concepts. Their results have not been generally acceptable. The main difficulty in measuring labour productivity arises owing to the output not being an exclusive product of labour. Capital, technology and management - all contribute to it along with labour and these seldom remain constant. In consequence, increases in per capita output cannot be attributed to labour alone, much less the total output. Valuation of the physical product presents another set of problems. All that we have is information about changes in output per worker at constant prices. These cannot, of course, be taken as indices of labour productivity. With these limitations on understanding the changes in productivity, we notice that for industries for which serial data are available, value added by manufacture has increased from Rs 2,113 in the year 1952 to Rs 4,621 in 1964.<sup>1</sup> Adjusting the increase in net output for price changes during the period 1952 to 1964 - and in this case it would be safe to use the index numbers of wholesale prices (for manufactures) - we find that production per worker has increased by about 63 per cent between 1952 and 1964. A part of it

1. Companion Volume on Statistics (Part I), p. 3.

must have been contributed by labour whose real earnings, have remained almost static during the period.

**15.16 Impact on prices:** An analysis of data in the *Census of Indian Manufactures* upto 1958 and in its successor, the *Annual Survey of Industries* (ASI), for later years shows that between 1952 and 1958, money wages as a percentage of total output dropped from 13.7 to 11.4. Between 1960 and 1964, on the basis of the new series of the *Annual Survey of Industries* (ASI), the drop was from 10.0 to 9.7. The decline varies from industry to industry but has been registered in all cases, except in case of fair sized units in the match industry where wage costs as a proportion of the cost of production have gone up. Even after adjusting the gross output in 1964 for prices (1952=100) and working out the share of wages to the output, so adjusted, there is a fall between 1952 and 1964.

**15.17 Share of Wages:** Finally, one has to take into account the share of workers in the value added by manufacture. And in this indicator, only two shares count: (i) of employers and those who have provided capital in the expectation of dividend and (ii) of workers. The percentage of wages to the value added by manufacture, on the basis of the CMI (*Census of Manufacturing Industries*) data, shows a decline from about 50 per cent in the period 1949-50 to about 40 per cent in 1958. This trend seems to have continued in the subsequent years as revealed by the data from the ASI. For instance, wages as a percentage of value added declined from about 40 per cent in 1960 to 36.5 per cent in 1964, the latest year for which information is available. Even if the money value of benefits and privileges is taken into account, the conclusion remains the same, though the decline then becomes less sharp. The table below brings out the trend.

**Table 15.1: Percentage of Wages, Salaries and Benefits to Value Added by Manufactures (Vam)**

Year	Per Cent of Wages to VAM	Per Cent of Salaries to VAM	Per Cent of Money Value Benefits to VAM	Per Cent of Wages, Salaries and Benefits to VAM
(1)	(2)	(3)	(4)	(5)
1949	53.3	10.6	1.1	65.0
1952	51.6	10.7	1.3	63.6
1955	41.8	10.6	2.7	55.1
1958	39.8	11.6	3.3	54.7
1960	39.6	11.4	4.7	55.7
1961	39.2	10.6	4.5	54.3
1962	39.6	11.9	4.7	56.2
1963	37.6	11.9	4.7	54.2
1964	36.5	13.7	5.1	55.3

Source: Statistics of Selected Manufacturing Industries-Part I, National Commission on Labour.

**15.18** To sum up, we note that increases in money wages of industrial workers since Independence have not been associated with a rise in real wages nor have real wage increases been commensurate with improvements in productivity. Simultaneously, wage costs as a proportion of total costs of manufacture have registered a decline and the same is true about workers' share in value added by manufactures. Wage disputes under these conditions have continued to be the single most important cause of all industrial dis-

putes.

### Trend of Evidence

**15.19** In the evidence before us, every group, Government, employees, trade unions or independent persons, agreed that wage policy should be geared to policies for economic development. Each group, however, had its own notions of how development should be achieved. Employers emphasised that industrial wages should have

relationship with wages in agriculture as also with the average per capita national income. Linking wages to productivity was another argument of theirs though in the course of further discussion, they admitted such linkage to be valid only for levels beyond the basic minimum wage. They agreed that a subsistence minimum wage must be a primary charge on the employer, but the minimum as defined by the CFW should have some relationship with the capacity to pay. Employers also sense some dangers in the present arrangement of neutralising rise in prices by providing dearness allowance linked with consumer price index numbers. They feel the need for a flexible wage arrangement, consistent with industry's need to raise resources out of its own surpluses, to meet at least a part of the cost of its expansion programme as suggested by the Government.

15.20 Unions in their evidence emphasised restoration of the recent fall in real earnings as a first step and, eventually, raising of living standards of workers through increase in wages commensurate with increase in productivity. Some of the facts which have been brought out in the earlier section of this chapter have been mentioned in support of their demand. Workers' organisations do not recognise that their claim is antithetical to development. Fair wage to labour is an item of cost. Resource requirements for the development of industry capital formation and return to entrepreneur, in their opinion, should come after provision of fair wages for labour. According to unions, planning in India, in spite of its operations for the last 18 years, has not improved the per capita availability of consumer goods to the common man. On the contrary, the supply position has been such as to have resulted in a sacrifice by the working class. Income disparities have, likewise, not been reduced nor is there any evidence in the current policies that they will be kept under control. Some of the arguments used by employers for shaping wage policy so as to deny workers their proper share could, with equal justification, be used against capital. Established social and economic relationships will have to change if progressive wage policies

are to be pursued; and national commitment to planning should amount to a change in the established social order. Administrative agencies have lacked vigour in giving relief to labour even where beneficial legislation has been enacted and suitable policies have been framed.

15.21 The State Governments have generally recognised the need for a change in wage policy. The relative emphasis which according to them is now in favour of labour should be modified and the interest of consumers should also be taken into account.<sup>1</sup> While in this respect their evidence seems to go counter to that of labour representatives, they are at one with labour in accepting that such beneficial policy measures as have been enunciated or enacted have suffered for want of adequate implementation. Government's commitment to improve living conditions in the country and to bring about a fair distribution of income and wealth have (has) been reiterated in a memorandum which we received from the Cabinet Secretary in response to the Chairman's request to the then Deputy Home Minister and Minister for Finance and to the Prime Minister for an authoritative statement from Government on some issues relating to wages. It was also urged by the Government spokesmen that the scope of economic development to raise living standards and to provide more employment in the immediate future was limited by resources. The same view was expressed by the Planning Commission.

15.22 We analyse at this stage some of the suggestions made in the evidence before us. A point is made that industrial wages should not be out of alignment with (a) per capita national income, (b) wages earned in the agriculture/cottage industries, (c) the general level of earnings of the self-employed, and (d) levels of productivity. This needs examination.

1. We have already pointed out that the general impression that wage costs have been increasing as a proportion of total costs is unfounded (see para 15.16).

(a) The main contentions of those advocating a linkage of industrial wages with per capita income are that (i) wages at any given time in any sector should not be out of gear with average earnings as reflected by per capita income and (ii) wage changes over time should not be out of tune with changes in per capita income. The first contention fails to recognise that in any economy sectoral productivities are bound to differ due to differences in skills, technology and capital and hence wage differentials are not only inevitable but based on sound grounds. It is of course necessary that the extremes which reflect imperfections of the market and inadequacies of measurement should be avoided. The second contention would be valid if wages in each sector were related to marginal productivity and the latter changed at the same rate throughout the economy. In so far as this is not so, wage changes cannot rightly be related to changes in per capita income. Here again, it has to be recognised that while changes in real per capita income reflect changes in productivity of the economy as a whole, wage variations in any particular sector may not always be based on productivity changes. A check against unsound wage increases may be provided by changes in per capita income. But this would ever remain a crude index and its limitations must be fully recognised in applying it to any specific case or situation.

(b) The argument that industrial wages should be at par with agricultural wages or wages in small-scale industries is apparently based on the assumption that marginal productivity of unskilled labour is the same throughout the economy. This is nowhere true, far less in our economy, where marginal productivity due to surplus labour in agriculture may be almost zero. The same applies to workers in cottage industries and handicrafts. Apart from differential productivity, this argument ignores differences in costs of subsistence of workers in agriculture and cottage industries on the one hand, and in the organised sector on the other. An industrial worker has to pay for many things the cost of which is simply nominal at the margin in his village home. There are similar differences in the disutility of work or the effort that a worker has

to put in, in different sectors. Finally, this argument ignores not only market imperfections in agriculture and cotton industries leading to sweated labour, but it also fails to recognise the economic necessity of a higher wage in the modern organised sector to transfer labour from the traditional sector. It is generally so in all transitional economies where such 'pull factors' have to be built up. The disparity between industrial and other wages may not be due to the fact that the former are disproportionately high, but because the latter are disproportionately low. It was for this reason that the Minimum Wages Act had to be enacted in 1948 to cover the scheduled industries. In any case, agricultural wages have been increasing in recent years; and in all areas agricultural labour is seldom available in the peak season on the statutory minimum wages. But a certain amount of disparity between industrial wages and wages in agriculture or cottage industries is necessary and must continue for the general health of the economy.

(c) The earnings of the self-employed persons and wages of employees can bear no comparison anywhere. Their effort and sacrifices are altogether different and so are their working conditions. Their respective productivities and earnings cannot be related. Very often a self-employed worker may be under-employed. His earnings, therefore, cannot be taken as a criterion to determine the wages of a worker required to put in full-time work.

(d) The argument that wages be linked to productivity has much to commend itself on principle. It is actually on this basis that wage differentials have a justification; and on this basis, industrial wages in general have to be higher than wages in agriculture or cottage industries. It may further be conceded that wage changes beyond a certain level must reflect productivity changes. But it is the application of this principle in practice that presents difficulties as contribution to productivity levels and changes therein are not easy to measure. It may be hoped that efforts to solve these practical difficulties will be intensified and made to succeed. Even then, productivity will be one of the factors affecting wages.

### Our Approach

15.23 We sought the assistance of the Study Group on Wage Policy which we constituted to sort out the issues connected with wage policy and to help us in framing our recommendations in this difficult area. The Group could not reach unanimity. The report it presented has two minutes of dissent, and rejoinders by its Chairman to each. We have carefully considered all these views in reaching our conclusions.

15.24 We believe that on an overall plane issues concerning wage policy are inter-related with broader economic decisions on the one hand and on the other with the goals set for social policy. Wage rates and differentials have a functional role in sustaining and developing the structure of society and thus merge with other elements of economic and social policy.

15.25 The functional role of wages is evident, since wages are a price for labour as a factor of skills and labour inputs, therefore, influence among other factors the pattern of allocation of labour. At the same time, these prices are also the incomes of wage earners and provide the necessary motivation for organisation of economic activity. If these factor prices are not in harmony with other prices in the system, the result is a disequilibrium which may manifest itself in deflationary or inflationary tendencies. In either case, the ensuing consequences affect the stability of the economy.

15.26 It is this need for ensuring the stability of the economy which has led countries like Netherlands, Norway, Sweden, France and the United Kingdom to adopt wage policies which are closely linked with policies relating to incomes and prices. The main aim has been to ensure that wage increases and increases in other incomes do not outstrip the growth in real national product. Wage increases inconsistent with the rate of growth of real output and productivity have been looked upon as a cause of 'wage price spiral'. The emphasis on the practical measures adopted for achieving this stability by the countries referred to above has indeed varied according to the social

and political environments in which they operate. Although conditions are different in our country in many respects, the experience does indicate that the wage policy has to be framed taking into account such factors as the price level which can be sustained, the employment level to be aimed at, requirements of social justice, and capital formation needed for future growth.

15.27 In our context while an integrated type of incomes and prices policy may hold out promise of fruitful results, the limits in pursuing it have to be recognised. In contrast with advanced countries, which have a predominance of wage employment, self-employment is dominant in our economy. The income and wage policy that may be formulated has to take into account this structural feature of the economy and has to be in accord with the pattern of income generation and distribution as envisaged in our development plans. Even so, the social basis of wage policy we have enforced to earlier may require consideration of wage policy as a distinct element of the income policy. We have to accept it as a distinct entity in the overall framework of the policy for economic growth. Having said this, we recognise that each one of the considerations which have guided wage policies in other countries is present in varying degrees in ours too. Viewed thus, our wage policy will comprise a set of principles capable of being consciously adopted to guide, by means of legislation or otherwise, actions of Government as also of parties vitally concerned.

15.28 It is often argued that in all industrially advanced countries like the U.S.A. the U.K., West Germany, Japan and the USSR, both the absolute level of per capita wages and the share of labour in the national product were more or less stable or were declining during the initial period of economic development. But in all of them, the political and social factors at the time of development were different from those obtaining in our country. The growth of the economy certainly depends on the rate of savings. To the extent wage incomes are consumption oriented rather than savings oriented, rise in wage levels signifies a corresponding diversion of a portion of the total national product from savings and investment to



consumption. In certain situations this can retard the process of economic growth and can act as a constraint. On the other hand, in order to maintain the tempo and the pace of growth, consumption increases cannot be continuously postponed or kept in abeyance in a period of rising expectations and possible social tensions. In fact increase in consumption may be necessary to sustain and improve the morale of workers and thereby the level of production and pace of economic growth. Wage earners expect to share in the gains of economic development and growth. Commensurate with checks and restraints on consumption required for sustaining the growth process, the standard of living of the workers has to improve. A democratic society with ideals of social justice will have to reconcile considerations of equity and fairness with economic compulsions.

15.29 In our country, due to large additions to the working force, the effect of wage levels on employment has a particular relevance. With an inadequate rate of growth of the economy, the sheer number of new entrants to the working population exerts a downward pressure on wage rates. Low wages, however, do not generate more employment in a less developed economy, since the latter is limited by scarcity of means of employment and the rate of capital formation. But high wages may result in a shift in favour of capital-intensive techniques and industries aggravating further the employment situation. To the extent this is not done, high wages may reduce the surplus of capital formation and affect employment potential. There is thus a conflict between the employment and wage goals. Its intensity depends on the choice of techniques and industries in the course of planned development. We however believe that this conflict, even when the techniques are given and cannot be changed in certain sectors of the economy, is not such that it cannot be resolved. Technologically, our economy will have to be for long a dual economy with a large range of capital and labour intensive techniques. Wage policy should offer an appropriate choice of techniques so as to maximise employment at rising levels of productivity and wages.

15.30 Wage policy should aim at a progressive increase in real wages. At the same time, any sustained improvement in real wages cannot be brought about without increasing productivity. The real wages of any group of workers cannot be unrelated to their productivity unless inroads into the share of other groups are made. The urgency of improving productivity levels to sustain increases in real wages cannot be over-emphasised. This in turn needs a widening and deepening of capital to raise technology on the one hand and investment in human capital on the other.

15.31 The wage levels will also have to recognise the dualism which reflects itself in different areas of wage employment. We have for instance the modern capital intensive large scale sector where rewards will continue to be more attractive, both to capital and labour. We have also, side by side, small enterprises and other traditional labour intensive sectors including agriculture. A uniformity in wage levels is either likely to affect the growth of the latter if the wage level is high or make inequalities even more glaring if the level is low and fiscal measures inefficient. Wage differentials consequent on this dualism, i.e., simultaneous existence of the modern capital-intensive sector and the traditional labour-intensive sector, are therefore, inevitable and desirable. But this does not necessarily mean that all existing differentials are scientific or based on differences in productivity. Steps should therefore be taken to standardise job classification and reduce differentials, wherever necessary, to suitable limits on a scientific basis.

15.32 The determination of wage employs evolving and sustaining a wage structure which (i) permits a fair remuneration to labour, (ii) permits a fair return on capital, and (iii) strengthens incentive to efficiency. Apart from these intra-industry wage-differentials, the inter-industry and inter-regional wage differentials have a relevance. The latter may be due to the limitations of the market or on account of inter-regional disparities in productivity due to differences in technology, capital per worker or organisation. It is expected that with the industries

competing for skill in the country as a whole these will soon be eliminated. Inter-industry differentials likewise are also unjustified except on grounds of local differences in technology and capital per worker.

15.33 Obviously, a crucial issue in regard to the wage-structure is that of the level at which it should be fostered. Here, the right of the workers for a fair standard, the claim of industry for expansion through its own surplus, the charges on the industry for public revenues, the need of the economy for resources and the need of the consumer to get supplies at stable and fair prices, all become relevant factors. But we are clear about one point that the first claim is of the worker for a basic minimum wage irrespective of any other consideration. Beyond this, however, in the determination of wage differentials the capacity to pay becomes relevant. These considerations highlight the need for a wage regulating mechanisms that should deal both with wage structure and its level from time to time.

15.34 An area of wage adjustment which we would like to specifically mention, and which is dealt with in detail in the next chapter, is in regard to adjustments in wage levels due to price changes. Often enough, the growth process may lead to a rise in the general level of prices and a change in the structure of relative prices. In order to protect the real wages from erosion, the level of money wages has to be adjusted to price changes. The present practice in this regard has been to pay dearness or dear food allowance over and above the basic pay to take into account of an increase in prices. It is possible that this practice of adjustment of wage levels may conceivably lead to inflation. It is also possible that in an inflationary situation the mere maintenance of the real wage itself may entail monetary outlays on a scale which reduces the surpluses available for further investment. Keeping living costs under check should therefore form an integral part of wage policy. At the same time, social considerations do cast an obligation to mitigate through some adjustment mechanism the hardships caused by price increases at least in respect of the vulnerable sections of labour.

15.35 We would like to emphasise here that the existing system of neutralisation of a rise in the cost of living either through dearness allowance or periodic wage adjustment cannot fully safeguard against a fall in real wages. Firstly there is a time lag; secondly neutralisation can seldom be cent per cent at all levels; and thirdly, the very process of neutralisation may push up the cost of living further, giving rise to the well-known spiral in which wages and living costs push up each other continuously. This last relationship or the feed-back mechanism is, however, often exaggerated. Firstly, the increased purchasing power in the hands of the workers on account of compensatory payments for rise in cost of living forms a small part of the overall increase in purchasing power. Secondly, the elasticity of compensatory payments to changes in cost of living is generally less than unity so that the feed-back must taper off. Money wage stability, is seldom a necessary, much less a sufficient condition for it. On the other hand, holding of the price line, particularly of the cost of living, is an adequate condition for preventing increases in money wage payments that are not related to increase in productivity. This alone can prevent a fall in real wages. Hence, policies that hold down living costs should form an integral of wage policy. A successful implementation of such policies would not only restrain increases in dearness allowance and compensatory wage payments, but it would also lead to the stabilisation of prices of goods whose costs are sensitive to wages.

15.36 Any wage policy, to be effective, has to take into account the existing practices in regard to methods and modes of payment of wages as well as the machinery for wage determination. In the context of improving production and productivity, it will have to recognise the role and the feasibility of introduction of payments by results in particular lines of activity with necessary safeguards. The extent of prevalence of the system of payment in kind and the existing practice of looking at the total wage as comprising different components like basic wage, dearness allowance and bonus have practical significance

in wage determination and regulation. Benefits and privileges in kind partake the nature of substitutes for cash compensatory allowances.

15.37 In the unorganised sector for the most part, adequate governmental or quasi-governmental machinery may be necessary to provide for minimum wage regulation according to conditions in different areas and industries, but more specifically to protect the workers in weak position. Thus it may be that different institutional arrangements for wage fixation may be needed for different groups. In one case, it could consist of Commission/Boards for framing wage awards and suitable administrative arrangements for supervising their implementation. In others, both for reaching wage decisions and for enforcing them, bipartite arrangements or collective bargaining between workers and employers may be the most appropriate system. In still other cases, a tripartite machinery may be appropriate. All these can co-exist in the country depending upon the traditions and experience which are built up for utilising them.

15.38 The broad objectives of wage policy as outlined by us have to be looked upon as guidelines for instituting concrete steps as the economy moves from one phase to another. In each phase, the emphasis on different objectives may change. The main aim of a wage policy, as we envisage it, is to bring wages into conformity with the expectations of the working class and, in the process, seek to maximise wage employment.

## CHAPTER 16

### MINIMUM WAGES

In tracing the evolution of wage policy and its impact on the economy in the last chapter, we have set out in brief our approach to it, taking into account the present social and economic conditions and the perspective of development. We now examine, in some detail, issues relating to a specific area of wage policy, viz., 'minimum wage' and its protection against rising prices.

### MINIMUM WAGE

#### Wage Concepts

16.1 Before dealing with minimum wages, it is necessary to be clear about the connotation of certain terms which are presently in vogue in discussing wage levels. Since we are not writing on a clean slate, it would be inappropriate to ignore them in formulating our views. The terms which have acquired currency in discussing wage problems since 1948 are: (i) the statutory minimum wage; (ii) the bare or basic minimum wage; (iii) the minimum wage; (iv) the fair wage (v) the living wage; and (vi) the need-based minimum wage. The first term owes its origin to the provisions of the Minimum Wages Act, 1948. The second is used in awards and judicial pronouncements. The next set of three terms have been introduced in the Report of the Committee on Fair Wages (CFW) and the last one in the Resolution of the 15th Session of the Indian Labour Conference in July, 1957.<sup>1</sup>

16.2 The statutory minimum wage is the wage determined according to the procedure prescribed by the relevant provisions of the Minimum Wages Act, 1948. This applies to the employments that are included in Parts I and II of the Schedule to the Act. The authority to include an employment in the schedule and to take steps for getting the minimum rates of wages fixed or revised vests in Government, Central or State, according to the nature of employment. Once the minimum rates of wages are fixed according to the procedure prescribed by law, it is the obligation of the employer to pay the said wages irrespective of the capacity to pay.

#### Early History

16.3 Although statutory regulation of minimum wages came into being only since 1948, the concept itself is old. It passed through several stages before achieving its present statutory character. The conditions under which labour worked when settled away from lands were not what it expected; but labour still chose to migrate

1. The ILC Resolution does not use the word 'need-based minimum wage', but the expression it uses is 'that the minimum wage was need-based'.

as pressure on land increased. With a large mass of unemployed and irregularly employed persons, and at times unscrupulous methods of employment, what a worker got in compensation for work was meagre. While this was the state of affairs in organised employment, in the unorganised sector, the effect of free play of market forces was even more disturbing. Public attention began to be focussed on the evils of low wages and underpayment of even the wages agreed to.

16.4 Apart from the early struggle in some industrial centres of the country to give expression to this plight of workers, a resolution recommending the establishment of industrial boards for determination of minimum wages for each industry in the Bengal Presidency was debated in the Bengal Legislative Council in 1921. In the meanwhile, working class had started organising itself. International influences, notably the emergence of International Labour Organisation, were also at work. In the course of its standard-setting activities, the International Labour Conference adopted in 1928 a Convention concerning creation of minimum wage fixing machinery. The Convention urged the member-countries to create a machinery, but it did not define the term 'minimum-wage'. However, a Recommendation concerning the application of minimum wage fixing machinery, adopted to supplement the Convention, required that for the purpose of determining the minimum rates of wages to be fixed 'the wage fixing body should, in any case, take account of the necessity of enabling the workers concerned to maintain a suitable standard of living. For this purpose, regard should primarily be had to the rates of wages being paid for similar work in trades where the workers are adequately organised and have concluded effective collective agreements or, if no such standard of reference is available in the circumstances, to the general level of wages prevailing in the country or in the particular locality'.<sup>1</sup>

16.5 The Whitley Commission examined the question of 'minimum wage' specifically in the light of the ILO Convention and observed, 'In our view the Convention, in referring to trades in which wages are "exceptionally low", must be regarded as having in view trades in which wages are low, not by comparison with Western or other foreign standards, but by comparison with general trend of wages and wage levels in kindred occupations in the country concerned'.<sup>2</sup> A few trades which the Commission named on *prima facie* considerations as fit for initiating inquiries were bidi making, tanneries (small establishments) and mica factories. If inquiries revealed the existence of sweated labour, steps to set up boards for fixing minimum wages were advised. Its general conclusion on this issue was, 'It is likely that there are many trades in which a minimum wage may be desirable but not immediately practicable. Here, as in other instances cited, the policy of gradualness should not be lost sight of if the desired end is to be achieved'.<sup>3</sup>

#### Minimum Wage-Statutory /non-Statutory

16.6 The question of minimum wage fixation came up again for consideration in the Committees appointed by the popular ministries which came into power in 1937 in four of the Provinces.<sup>4</sup> They were required *inter alia* 'to examine the existing levels of wages and living conditions of labour'. The Committees were generally in favour of minimum wage regulation. The Central Legislative Assembly also adopted a resolution<sup>5</sup> in February 1938 urging payment of 'sufficient wages' and fair treatment to workers employed in industries receiving protection or subsidy from the Government. 'Sufficient Wage' was defined as 'a wage which would ensure to every worker the necessities for existence, food, clothing, housing and education, taking into account at the same time the practical side of the question and the needs of the industry'. The implementation of

1. ILO Conventions and Recommendations, 1919-1966, p. 133.

2. Report of the Royal Commission on Labour, p. 212.

3. *Ibid*, p. 214.

4. The Four Provinces which set up Committees were Bombay, Bihar, Central Provinces and United Provinces.

5. Quoted in the Report of the One Man Committee on the Working of the Minimum Wages Act, published by the Ministry of Labour and Employment, 1966, p. 16.

the resolution was, however, deferred. 'Minimum Wage' was discussed in the 5th session of the Indian Labour Conference held in September, 1943 but in the context of 'social security'. The question of statutory wage control was again discussed in the Fourth Session of the Standing Labour Committee held in January 1944. The Committee came to the conclusion that there was a fair body of opinion in favour of some form of minimum wage for regions, but the enforcement of the minimum wage was a matter of very great importance.

16.7 After a full debate in another session of the Indian Labour Conference and scrutiny in a special sub-committee appointed by it, the Minimum Wages Bill was introduced in the Central Legislative Assembly in April, 1946 and the Act enforced in March, 1948. It empowers the Central and State Governments to fix minimum rates of wages for different employments listed in the schedule to the Act. Thirteen employments were originally included in the schedule, but provision was made enabling the State Governments to add to the list. The appropriate Government 'may refrain from fixing minimum rates of wages in respect of any scheduled employment in which there are in the whole State less than one thousand employees engaged in such employment'. The Act also provides for review of rates of wages fixed at intervals not exceeding five years.

16.8 The passing of the Minimum Wages Act, 1948 is a landmark in the history of labour legislation in the country. It recognised that wages cannot be left to be determined entirely by market forces. As we have already indicated<sup>1</sup> once a minimum wage is fixed according to the provisions of the Minimum Wages Act, it is not open to the employer to plead his inability to pay the said wage to his employees. In other words, after the minimum wage is determined under the Act, the obligation of the employer to pay the said wage is absolute. What applies to establishments included under the schedule to the Minimum

Wages Act, must, on principles of social justice, apply with equal force to industrial establishments not included in the schedule.

16.9 The whole philosophy underlying the enactment of the Minimum Wages Act is to prevent exploitation of labour through the payment of unduly low wages. We have just described the passing of the Minimum Wages Act as a landmark in the history of labour legislation, because the whole concept underlying the Act was, in 1948, new and revolutionary. The effect of the provisions contained in the Act is to make it clear that the rule of the market and the law of supply and demand will not be allowed to govern the terms about the wages as between employers and employees in respect of establishments falling under the schedule. In a country like ours, where the number of unemployed persons is very large, the legislature realised that if the rule of the market was allowed to prevail, it will be difficult to prevent sweating or exploitation of labour through payment of unduly low wages. It was to prevent this position that the law was enacted and specific provisions made for determining minimum wages in respect of Scheduled industries. If that be the basic concept on which the provisions of the Minimum Wages Act are founded, it would follow conceptually that just as in the case of the Scheduled industries statutorily determined minimum wage has to be paid by the employer to his employees in order to prevent sweating or exploitation of labour, so must the employer in any establishment not covered by the Schedule pay his employees a minimum wage. As we have indicated broadly in dealing with our approach, considerations of social justice play a major role in shaping the social, economic and industrial policies of a welfare State like ours. This aspect should be borne in mind by wage fixing authorities in fixing the level of wages.

16.10 Experience shows that wage rates in non-scheduled industries are fixed in a variety of ways. They are settled either for the industry as a whole in a local area or for different units, if within a local area not many units operate in the same industry. Generally, wage settlement proceeds on

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1. Please see para 16.2.

the basis of fixing the wage for the lowest category of workers in the industry or unit, differentials for skills being built up on the basis of this minimum. If wage determination is industry-wise within an area, the wage fixed, whether it is through collective bargaining or with the help of the Industrial Relations Machinery (IRM), is on the basis of overall capacity of the industry to pay. The IRM has consistently taken the view in such cases that the capacity to pay of an individual unit is irrelevant for fixing the minimum for the industry in a local area so long as the industry as a whole can pay. If a unit has no capacity, either it goes out of existence or improves its working to acquire the necessary capacity. Where, however, the wages for individual units in a local area are fixed through collective bargaining or the IRM, arguments are entertained, in the process of such determination, about the capacity of the units to pay.

#### **Assessment of the Working of the Act**

16.11 Although the Minimum Wages Act was intended mainly as a measure to prevent sweating or exploitation of labour through the payment of unduly low wages, it took in its sweep employments in which labour was unorganised or weakly organised. Over the years, a number of new employments were added by the State Governments to the original schedule, depending on local requirements. But such extension of the coverage of the Act brought in its wake difficulties of implementation.

16.12 The First Plan, while recommending that full and effective implementation of minimum wage legislation should be secured, suggested that depressed areas and employments should receive prior attention. The Second Plan envisaged no change in this regard. According to it, 'the ultimate effect of legislation relating to minimum wages is to improve wage levels in rural areas'. It recommended further that 'despite the limitations, a steady effort should be made to enforce the wage rates which are fixed'.<sup>1</sup> In

expressing disappointment over the implementation of the Minimum Wages Act, 1948, the Third Plan observed that the provision for fixation and revision of wage rates had not proved effective in many cases. It suggested strengthening of the inspection machinery to ensure better implementation.

16.13 Thus, while it was generally accepted that the Minimum Wages Act, 1948 served a useful purpose in checking exploitation of labour in employments where conditions of sweating prevailed, dissatisfaction was expressed over the lack of proper implementation of the provision of the Act. This has been one common complaint in the evidence before us. An equally persistent complaint has been that the minimum wages, once fixed, have not been revised for long periods in many employments, though the Act provides that wage rates once fixed should be reviewed at intervals not exceeding five years. We have come across several instances where the rates have not been revised even once after they were initially fixed. In some cases, there has been only one revision, while in a few others there have been two. Viewed in the context of price rises which have taken place, the position seems to be unsatisfactory. It is but natural, therefore, that during the course of our visits we found that the prevailing rates of wages were distinctly higher than the minima fixed; in many cases, workers did not even care to know the minimum fixed under the law. This circumstance highlights the need for a periodic review of wage rates to prevent sweating and to eliminate the areas of depressed and distress wages. We recommend that the provision made in the Minimum Wages Act, 1948 for wage revision should be amended making it obligatory on the appropriate Government to revise the minimum wages prescribed under the provisions of the Act at least once in every three years. If, as the result of an adverse price situation wage rates require adjustment within three years, the local authority should make such adjustment.<sup>2</sup>

1. Second Five Year Plan, p. 320.

2. Shri Vasavada, Shri Ramanujan and Shri Malviya feel that the statutory minimum wage should be linked to the appropriate Consumer Price Index Number.

16.14 The situation referred to in the paragraph above could also arise as conditions of sweating cease to exist in certain employments which were originally covered under the Act. It has been suggested by some employers that provision should be made for deletion of an employment from the Schedule to the Act when conditions of sweated employment no longer exist in it. *Prima facie* this appears to be a logical suggestion. There is no special merit in a worker being told that he is working under conditions of sweating. Nor does it edify an employer to be reminded that his workers need such protection. We recommend, therefore, that the provision should be made in the Act for periodic revision of the Schedules to the Act, so that employment(s) which cease to employ sweated labour are deleted from the Schedule—and such employments as employ sweated labour are added to the Schedule. Before taking action about the deletion of an employment, the State Government should satisfy itself that withdrawal of statutory protection will not operate harshly on workers. To widen the coverage of the Act, we also recommend that Section 3(I-A) of the Act should be suitably amended so that the employment limit for enabling a State Government to fix a minimum wage for a particular employment included in the Schedule to the Act is reduced from 1,000 to 500 in the whole State.

16.15 A criticism against the Act has been that it does not define the term 'minimum wage'. While several States consider that the concept of minimum wage as currently applied to sweated industries needs no change, trade unions have urged that to avoid differences in interpretation by wage fixing authorities, 'minimum wage' should be spelt out in precise terms. Our examination has revealed that neither the State authorities in charge of minimum wage fixation have followed a uniform set of principles while fixing or revising wage rates. They have mostly been going by their own assessment, over which the prevailing rates of wages have a firm hold.

The minimum Wage may thus vary from region to region and even within the same region from time to time depending on particular situations. Prescribing some rigid criteria in regard to minimum wage fixation is, therefore, neither feasible nor desirable. It will necessarily have to be left flexible. We are further of the opinion that laying down a rigid cash equivalent of the content of a statutory minimum wage whose coverage is essentially transitional under conditions of development would not serve any useful purpose.

### National Minimum Wage

16.16 Our terms of reference require us to report on the need of fixation of a national minimum wage. Several State Governments and some Government Departments have been of the general view that a 'national minimum wage' could be an alluring concept, but difficulties in giving shape to it should not go unrecognised. They fill that a start should be made by fixing 'regional minima'. Workers' organisations, on the other hand, have suggested a national minimum below which no employer should be allowed to hire labour. At the same time, some of them expressed an apprehension that the minimum so fixed will tend to be the maximum and they require us to evolve suitable safeguards. With this national minimum, there should also be regional minima worked out with special reference to the ways of living in different areas. Employers have suggested fixation of a national minimum with the provision that it should take into account national per capita income and that it should be applicable to industrial as well as non-industrial employments. Some draw another distinction. They feel that a national minimum for sweated industries may be fixed, but fixing a minimum is unnecessary for others.

16.17 The advocates of a national minimum wage claim that such a minimum would have more extensive coverage and would make implementation easier and effective because of its simplicity. A national approach would also enable minimum wage policies to be easily correlated with the general development policies and bring about rationalisation of wage structure itself. We

do not think that the advantages claimed for the national minimum are absent in the case of the sectoral minima or that the so-called advantages are really advantages under all circumstances. Far from leading to ease and effectiveness of administration, we apprehend that the fixing of a national minimum with a necessarily wider coverage may bring in its train a number of difficulties. Because of the vastness of the country and wide differences in the levels of development in industries and regions, a uniform national minimum wage will be untenable. Lack of coordination which is attributed to a sectoral system is also not such as could not be tackled. A greater measure of coordination can be achieved through Minimum Wage Advisory Committees at the Centre and in the States. Experience in other countries also does not encourage us to recommend a national minimum. We, therefore, feel that a national minimum wage in the sense of a uniform minimum monetary remuneration for the country as a whole is neither feasible nor desirable. If one is fixed, the dangers are that there will be areas which will not afford the minimum, if the minimum is worked out somewhat optimistically. And if calculations are allowed to be influenced by what a poorer region or industry can pay, the national minimum will not be worth enforcing. While, therefore, it is true that a national minimum, whatever is content, may provide workers' organisation with something on the basis of which they could create public opinion, the inherent difficulties in fixing the minimum cannot be ignored. It may be possible, however, that in different homogeneous regions in each State regional minima could be notified. In fact, such regional minima seem to be called for in view of the wide variation in the rates of minimum wages fixed under the Act even within a small geographical region. An effort should be made to fix such regional minima. And this can as well give workers' organisations the necessary means to build up public opinion in favour of not allowing any employer to go below the notified minimum. In due course, the region itself could be widened to cover the whole State. But, widening of the area for fixation of minimum wage beyond a State may be impracticable and also not in the best interests of the workers. In respect of

certain industries which are spread over two or more adjacent States, fixing a common statutory minimum wage may be feasible and indeed desirable; its absence may lead to a flight of industries which do not need much of capital equipment, from one State to another, as is reported to have happened in the case of the bidi industry.

### **Need based Minimum**

16.18 The minimum wage policy as it has emerged in this country distinguishes between the organised industries and the sweated ones. The Minimum Wages Act, 1948 is the instrument which seeks to protect the interests of workers in the latter. In the organised sector, the wage fixing authorities have generally been guided by the Report of the CFW. The Minimum defined by it indicated only the components which should be taken into account in fixing the minimum wage. It was the Indian Conference (15th Session) which for the first time, moved in the direction of formally quantifying its main components. The resolution adopted by the Conference and its interpretation are discussed in detail later.

### **Approach of the Second Pay Commission**

16.19 The quantification of the 'need-based minimum wage' raised the question of its practicability and, indeed, other basic issues as to whether need alone should be the criterion for wage fixation. The Commission of Enquires on Emoluments and Conditions of Service of Central Government Employees, 1957-59 (the Second Pay Commission), while examining the question of minimum remuneration for Central Government employees, took note of the norms set by the ILC and the minimum worked out on this basis by the major organisations of the Central Government employees. These calculations showed that on the basis of prices prevailing towards the end of 1957 the minimum could vary between Rs 110 and Rs 137. Neither the details of these calculations nor of those leading to Rs 125, which has been referred to by the Pay Commission as the likely cost of the need-based minimum, are



available in the Report. The Second Pay Commission, while accepting the other norms of the ILC, worked out its own diet schedule which could yield a calorie content lower than one worked out by the ILC and justified the lower caloric content on the basis of the evidence before it. The money value of the minimum wage worked out on the basis of this diet came to Rs 80, corresponding to all-India Working Class Consumer Price Index Number 115 (1949=100). This calculation was supported also on other grounds such as the availability of foods, the current wage level, the needs of the economy for development, and wages in similar occupations. The fact that the Pay Commission examined in detail the resolution of the 15th ILC and took into account the needs of the Government employees in fixing their minimum remuneration leads us to believe that it was fully conscious of the case for a need-based minimum wage. It, however, felt 'that more important than the fact of quantitative definition of minimum remuneration is the content of what is defined'.<sup>1</sup>

16.20 The wage boards which reported after the Second Pay Commission have by and large taken a cue from its conclusions and not gone into the details, though some have tried to work out the money equivalent of the norms suggested by the 15th ILC. Our Committee on the Functioning of the System of Wage Boards took note of this fact and reported that a majority of the wage boards had not found it feasible to fix the 'need-based minimum' of the ILC because of one or more of the following reasons: '(a) it would be beyond the capacity of the industry to pay, (b) it would unduly affect the relativity of wages among industries in the same region, (c) it would result in excessive and abrupt increase in wages, and (d) it would be extravagance at the cost of the consumer on whom the burden of increased wages and salaries would fall'.<sup>2</sup>

### The 'Norms' of the 15th ILC

16.21 In all controversies over the ILC formula, the food norms have been attacked the most. A specific recommendation was, therefore, made in the Third Plan that 'nutritional requirements of a working class family may be re-examined in the light of the most authoritative scientific data on the subject'.<sup>3</sup> The National Nutrition Advisory Committee (NNAC), which was required to examine the issue, came to the conclusion that the food requirements should be taken into account for the family as a whole, and that too on the basis of a net intake of 2,750 calories per adult consumption unit per day. In arriving at the calorie requirements for an average family, the NNAC evaluated separately the requirements of each member and on that basis reached its conclusions about the needs of the family. A similar procedure was adopted in regard to other nutrients in the diet such as proteins, fats, calcium, iron and vitamin A.

16.22 We reproduce in Annexure I [not inserted] a statement showing the nutritional content of the diet actually consumed by the working class in certain important centres on the basis of information contained in the 1958-59 family budget enquiries. It provides a comparison of the nutritional content of the diets actually consumed with what should have been consumed by the family on the basis of the National Nutrition Advisory Committee's recommendations. We notice that only in seven out of twenty-two centres was the nutritive content of the diet significantly below the NNAC's recommendations. Two nutrients, the intake of which was below that recommended in the report, are calcium and vitamin A. We have consulted nutrition experts in India and abroad on the effect of calcium and vitamin A deficiencies on the health and efficiency of workers. Their view is:

1. Second Pay Commission, p. 64.

2. Report of the Committee on the Functioning of the System of Wage Boards, Pp. 25-26.

3. The Third Five Year Plan, p. 256.

- (i) 'An Expert Group appointed by the WHO/FAO came to the conclusion that there was no case on the basis of available evidence for suggesting an increased calcium supplementation to populations subsisting on lower levels of calcium, of the order of 400 mg. No evidence of specific signs of deficiency has been reported in those subsisting on a daily intake of 300 mg of calcium. Furthermore, supplementation of the diets with calcium to populations living on diets providing 300 mg. of calcium conferred no benefit'.
- (ii) 'Inclusion of green leafy vegetables in the levels recommended in the balanced diet should be able to prevent Vitamin A deficiency. Inclusion of these green leafy vegetables should not increase the cost of the diet'.

We, therefore, come to the conclusion that the diet consumed by the average working class family in 1958-59 was not far out from what was required according to nutritional standards. The deficiencies in some nutrients also appear to be either unimportant or could be made up within the working class budget at not much additional cost. It should, however, be noted that this is only in so far as the average working class family is concerned. In respect of those who were at the minimum, the position could have been different. If it was so, it means that those at the minimum will have to be brought to the level of the average then existing at least in respect of food.

16.23 An exercise<sup>1</sup> was undertaken, under our sponsorship, to compute the cost of need-based minimum wages by resorting to linear programming techniques. The constraints imposed in feeding the computer included *inter alia* the pattern of consumption prevailing in 1958-59, the nutritional requirements of the average family, the availabilities of the various food-stuffs keeping in mind the local rationing restrictions on certain items of consumption, and the nutritional content of the average varieties consumed. The

results which have been summarised in Annexure II [not inserted]. It will be seen that the cost of the need-based minimum varies from about Rs 155 p.m. to about Rs 225 p.m. at the 1967 price level in different centres. Adjustment as a result of lowering the calcium content of the diet does not affect the cost substantially. The cost of clothing has been worked out by applying the 1967 average price of (the) different varieties of cloth to the norms suggested by the ILC. For housing, the rent payable under the Subsidised Industrial Housing scheme has generally been taken. While in some centres the existing wage levels are not far out of those arrived at on the above basis, in others the latter are substantially higher than the prevailing wage levels. It is also important to note that the minimum so arrived at for each centre will be subject to sampling variations. Whilst we have referred to the exercises undertaken with the aid of the computer, we are expressing no opinion on the acceptability or otherwise of the conclusions drawn. That is a task which wage fixing authorities may have to attempt in a manner which may appear to them to be fair and just.

16.24 The foregoing paragraphs briefly review the developments in regard to the need-based minimum, since the Resolution was adopted in 1957. The difficulty about the need-based minimum wage is not so much in regard to the nutritional requirements as it is in regard to its contents and monetary quantification. It is in this light that we will have to examine the role and place of the need-based minimum in our wage structure. We do this by briefly recapitulating, even at the risk of repetition, the various definitions, particularly those mentioned in the report of the CFW.

### Our Analysis

16.25 The CFW referred to several terms used in relation to the different levels of wages. We are concerned however with three of them. They are: 'the minimum wage', 'the fair wage' and 'the living wage'. The general scheme of the CFW is that the minimum wage represented the lower

1. The exercise was undertaken by the Indian Social Institute, New Delhi, with the computer facilities available in the Planning Commission.

limit of the fair wage. Beyond it was the higher level of the fair wage; and the highest level of the fair wage was the living wage. These levels naturally do not represent a static, inflexible concept; they would vary and expand according to economic development and compulsions of social justice.

16.26 According to the CFW, a minimum wage must provide not merely for the bare sustenance of life, but for the preservation of the efficiency of the worker. For this purpose, the minimum wage must also accommodate some measure of education, medical requirements and amenities. The CFW categorically stated that an industry which was incapable of paying this minimum wage had no right to exist. But, if the continued existence of an industry which was not in a position to pay the minimum wage was imperative in the larger interests of the country, it was the responsibility of the State to take steps to enable that industry to pay at least the minimum wage. The Committee was of the definite view that for fixing the minimum wage no regard should be paid to the capacity of an industry to pay and it should be based solely on the requirements of the worker and his family. On the other hand, the upper limit of the fair wage, according to the CFW, 'is equally set by what may be broadly called the capacity of the industry to pay'.<sup>1</sup> In other words, the CFW recognised that the minimum wage as described by it formed part of the fair wage, though at its lower level. For claiming such a wage, the employees, in its view, should not be called upon to prove an employer's capacity to pay. In regard to the wage levels above the minimum wage, which would fall under the category of fair wage, the CFW made the capacity to pay a condition precedent for the prescription of such a wage.

16.27 The living wage, according to the CFW, represented the highest level of the wage and, naturally, it would include all amenities which a citizen living in a modern civilised society was

entitled to expect when the economy of the country was sufficiently advanced and the employer was able to meet the expanding aspirations of his workers. As the traditional doctrine interprets it, the living wage is 'a will of the wisp which floats a little further ahead, an arm's length out of reach. Its pursuit belongs to the same category as "squaring the circle"'.<sup>2</sup>

16.28 The 15th Indian Labour Conference considered the question of minimum wage and adopted a resolution the relevant portions of which are reproduced below:

'2. With regard to the minimum wage fixation it was agreed that the minimum wage was "need-based" and should ensure the minimum human needs of the industrial worker, irrespective of any other considerations. To calculate the minimum wage, the Committee<sup>3</sup> accepted the following norms and recommended that they should guide all wage-fixing authorities, including minimum wage committees, wage boards, adjudicators, etc'.

- (i) In calculating the minimum wage, the standard working class family should be taken to consist of 3 consumption units for one earner; the earnings of women, children and adolescents should be disregarded.
- (ii) Minimum food requirements should be calculated on the basis of a net intake of 2,700 calories, as recommended by Dr. Aykroyd for an average Indian adult of moderate activity.
- (iii) Clothing requirements should be estimated at a per capita consumption of 18 yards per annum which would give for the average worker's family of four, a total of 72 yards.
- (iv) In respect of housing, the norm should be the minimum rent charged by Government in

1. Report of the Committee on Fair Wages, p. 15.

2. *The Just Wage* by Prof. M. Fogarty, 1969, p. 152.

3. The reference here is to the sub-committee of the Indian Labour Conference which went into this question and on the basis of whose report the ILC adopted this resolution.

any area for houses provided under the Subsidised Industrial Housing Scheme for low income groups.

- (v) Fuel, lighting and other 'miscellaneous' items of expenditure should constitute 20 per cent of the total minimum wage.

'3. While agreeing to these guidelines for fixation of the minimum wage for industrial workers throughout the country, the Committee recognised the existence of instances where difficulties might be experienced in implementing these recommendations. Wherever the minimum wage fixed went below the recommendations, it would be incumbent on the authorities concerned to justify the circumstances which prevented them from adherence to the norms laid down'.

'4. The Committee took note of the steps taken by Government for conducting (a) a wage census, and (b) family budget enquiries in various industrial centres'.

'5. As regards fair wage, it was agreed that the Wage Board should go into the details in respect of each industry on the basis of the recommendations contained in the report of the Committee on Fair Wages. These recommendations of the Fair Wages Committee should also be made applicable to employees in the public sector'.

16.29 A view put forward before us is that the need-based minimum wage, the contents of which were concretely enumerated in the ILC Resolution in clauses (i) to (v) of paragraph (2), is in substance the same as the minimum wage described by the CFW. It is argued that the ILC which quantified the need-based minimum wage recognised by implication the infirmity in the observations made by the CFW that the minimum wage as prescribed by it, though it fell within the range of fair wage but at its lower level, had no relevance to the capacity to pay. In other words, the tripartite resolution took the view that the minimum wage as described by the CFW and as concretised by the Resolution itself was the lower level of the Fair Wage and the principle that in fixing a fair wage the capacity to pay must be

considered was applied to it. However, the Resolution, according to this view, took the precaution to say that if any employer pleaded lack of capacity to pay the need-based minimum wage, the onus would be on him to prove the fact of his inability. In other words, it is not for the employees who ask for the need-based minimum wage to prove that the employer has the capacity to pay; it is the other way round. To sum up, according to this view, there is, in substance, identity in the content of the minimum wage as enumerated by sub-clauses (i) to (v) of paragraph (2) of the Resolution and the minimum wage described by the CFW. Hence, in prescribing such a minimum wage, the capacity to pay has to be taken into account.

16.30 The other view is that had the ILC Resolution really meant that the capacity to pay should be taken into account in fixing the need-based minimum wage, it would not have said in para 2 of the Resolution that the said wage should ensure the minimum human needs of the industrial worker irrespective of other considerations. The fact that the Resolution really meant that the need-based minimum wage was the irreducible minimum is borne out by its recommendation in regard to fair wages made in para 5, wherein it has been suggested that as regards fair wage the wage boards should go into the details in respect of each industry on the basis of the recommendations contained in the Report of the CFW, since the criterion of capacity to pay is the main distinguishing feature between the minimum wage and the fair wage as per the CFW. According to them, the capacity to pay is not to be taken into account in fixing the need-based minimum wage.

16.31 We have carefully considered both the views and we are inclined to agree with the former. Since most of the Wage Boards have taken into consideration the capacity to pay in fixing the minimum for the respective industries, the wages fixed by them fall in the realm of fair wages, though at its lower level. The need-based minimum wage is also a level of fair wage and represents a wage higher than the minimum obtaining at present in many industries, though it

is only in the lower reaches of the fair wage. We, therefore, hold that in fixing the need-based minimum, the capacity to pay will have to be taken into account. Experience with wage determination since the formula was adopted in 1957, supports this conclusion. The need-based minimum which is in the range of the lower level of the fair wage attracts, in its determination, the employer's capacity to pay. It is the level of wage towards the attainment of which every industry should strive and to which every worker in organised industry has a claim. The onus of proving that the industry does not have the capacity to pay that wage should lie on the employer. We recognise that the need-based minimum wage and the wages at the higher levels of fair wage, may and can be introduced by convenient and just phasing, keeping in mind the extent of the capacity of the employer to pay the same. This has to be a pragmatic process which the wage-fixing authorities will have to keep in mind.

#### DEARNESS ALLOWANCE

#### Historical

16.32 Adjustments in wage levels become necessary, amongst other factors, on account of increase in the cost of living and improvement in economic conditions. While wage adjustments in respect of the former aim at preventing erosion of wage levels in real terms, adjustments belonging to the latter category are intended to improve real standards. It is only the first aspect, viz., prevention of erosion which we consider in this section.

16.33 During the First World War, when prices went up, demands were made by labour in different industries and different centres to secure compensation for price increases. In Ahmedabad, the demand led to the epic fast of Mahatma Gandhi and it succeeded in securing for workers

the principle of protecting their real wage in the event of a substantial rise in prices. This compensation, presently termed as Dearness Allowance (D.A.), was at some centres called dear-food allowance [to emphasise its food component] in the early stage of its being recognised as a separate component of the remuneration for work. In the inter-war period, and particularly during recession, these allowances were adjusted taking into account the lower price. The practice of paying a D.A., distinct from the basic wage, had these early beginnings.

16.34 The out-break of the Second World War disturbed the then existing relationship between wages and prices and raised industrial disputes. Compensation for increase in prices was sought and secured during the period 1940-45 mainly through the institution, set up for the settlement of such disputes. The main reason for keeping these allowances separate was the assumption as to the temporary character of increased living costs. The expectation that such allowances would be adjusted downwards and eventually disappear. This hope firmly expressed in many reports, has still remained a hope. Originally confined to certain sections of organised workers particularly in the industrial sector, the practice of paying D.A. spread to many unorganised sectors and also to public services. In the last thirty years, the principle of D.A. found acceptance *inter alia* in the report(s) of the Rau Court of Enquiry (1940),<sup>1</sup> the Rajadhyaksha Award (1946),<sup>2</sup> the Central Pay Commission (I) 1947, the Committee on Fair wages (1948), the Bank Award Commission (1955), the Second Pay Commission (1959)<sup>3</sup> the Das Commission (1965)<sup>4</sup> and the Gagendragadkar Commission

1. The Court of Enquiry constituted under the Trade Disputes Act to investigate the dearness allowance of railway employees.

2. Adjudication by the Hon'ble Mr. Justice G.S. Rajadhyaksha, ICS, (Bombay High Court) in the Trade Dispute between the Posts and Telegraphs Department and its non-gazetted employees.

3. Commission of Enquiry of Emoluments and Conditions of Service of Central Government Employees (1959).

4. One-Man Independent Body for revision of Dearness Allowance of Government Employees.

(1967).<sup>1</sup> The industrial relations machinery such as industrial courts, industrial tribunals, and conciliation offices found it convenient to give satisfaction to the parties by adjusting remuneration on this basis. Since 1957, the Government of India set up a number of wage boards for determining terms of employment in several industries. The wage boards have generally sought to keep the D.A. as a separate component of wage, although some of them recommended the merger of a substantial part of D.A. with the basic wage. Tripartite meetings over the last twenty years have also felt likewise.

16.35 The system of payment of D.A. has varied from centre to centre, and from industry to industry even within a centre. In some cases it was linked to the Working Class Consumer Price Index; (hereafter referred to as the Index), in others it was not. It was at a flat rate and was applicable in some cases to all employees irrespective of their wages; in others, it varied according to wage or salary slabs. A graded percentage, linked to wages and salaries, was also prevalent. Permutations and combinations of such payments resulted in a variety of systems, with D.A. linked to the Index emerging dominant. The Occupational Wage Survey undertaken in 1958-59 revealed that of those who were getting separate D.A., 41 per cent had their D.A. linked to the Index; for another 28 per cent, it was at a flat rate; a fixed proportion of income in different groups was the method of compensation in the remaining 31 per cent. As a result of the operation of wage boards after 1958-59, the area where D.A. is related to the Index has enlarged considerably. According to one estimate, nearly two-thirds of the industrial working force is now being compensated on this basis. Thus the prevailing system of D.A., originating as a protection against a fall in real wage and temporary in character, has come to stay as a part of the total wage structure.

### Foreign experience

16.36 The system of payment of D.A. as a separate component of wages is a special feature peculiar to India and some Asian countries. In the industrialised countries, wages themselves are adjusted as and when necessary. Several wage agreements provide 'escalator clauses' or 'wage re-opening clauses' or provide for a review of wage rates when prices rise above a certain point. 'Escalator clauses', which are somewhat similar to linking the total wage to the index are common in the U.S.A., Belgium, Denmark and Italy; whereas 'wage re-opening clauses', where all other clauses remain undisturbed except the one which relates to wages can be reopened even during the pendency of the contract, occur in several wage agreements in Norway and Sweden and in some agreements in the U.S.A. during 1954-58. In several Asian countries, the situation is met more or less by arrangements similar to those obtaining in our country. In Ceylon, there are several allowances, such as cost of living allowance, rent allowance and special living allowance which have the same effect as our D.A. In Japan, wages include cost of living allowance and rent allowance. Thus, international experience shows that while some form of relationship between wage levels and cost of living increase is preferred, the form of relationship varies. While the predominant pattern appears to be the adjustment of wages as a whole, the practice of keeping the compensation for price increase as a separate element also exists; both arrangements have their own advantages and disadvantages. The main advantage claimed for the latter is its flexibility. It is argued that while wage rates cannot be brought down because of a fall in price, the dearness allowance if kept as a separate element, can. The system can also be designed to reduce the time-lag between the price increases and payment of compensation therefor. The opposite view is that the way the system has operated all these years has resulted in a complete distortion of the wage structure, with the dearness allowance portion in certain areas being several times the size of the basic wage. This may have

1. Dearness Allowance Commission on the question of the grant of dearness allowance to Central Government employees in future.

an adverse repercussion on incentives and productivity. The system of D.A., as it has evolved in this country, may under certain circumstances add to the inflationary tendencies. We have considered these issues and feel that changes in money wages should be associated with corresponding changes in cost of living. Without such adjustment, real wages would be eroded. How such adjustment should be brought about, whether by keeping the D.A. as a separate item or by periodic revision of wages, is not so important. But, since the system of D.A. has come to stay in this country, and as in most of the cases it is linked to the index, we propose to deal in some detail with the issues arising out of such linkage.

#### Analysis of Evidence

16.37 For convenience of discussion, we propose to analyse the evidence before us under five broad heads:

(a) D.A. as a separate component and linked with the index;

(b) the choice of the index with which a link is sought;

(c) extent of neutralisation;

(d) frequency of adjustment; and

(e) relationship between D.A. and 'capacity to pay'.

16.38 State Governments have generally favoured the retention of D.A. as a separate component in the wage structure. Some have suggested adjustment either after a period of time (say, a year or six months) or when the index crosses a certain limit. Several employers' organisations oppose the system of linking D.A. with the index; in their view, it is not conducive to the health of the economy. It is unfair, according to them, for a section of the population to expect insulation against price rises when the same cannot be extended to a large mass of others.

Workers organisations, on the other hand, have all favoured compensation through D.A. and have suggested its periodic review in order to merge a part of D.A. with basic wage. They have also pleaded for adequate neutralisation. Many Study Groups appointed by us have come to the same conclusion.

16.39 We consider that payment of D.A. has to be viewed in the broader context of wage policy, many elements of which have been discussed in the previous chapter. In a developing economy where price stabilisation has proved ineffective, or the inflationary potential cannot be controlled, any arrangement for compensating for price rise will have its *raison d'être*. At the same time, a direct linkage between a rise in the index and the D.A. may create problems for stabilisation. It can hardly be disputed that the index is the best available indicator of changes in price level.<sup>1</sup> The reason for a disproportionately high D.A. is the fixation of basic wage on a date far remote from the present. For an employer it was convenient then to have a small basic wage, as many benefits conferred on workers were related only to the basic wage. The situation has now changed. Over the last 20 years, the tendency has been increasingly in favour of computing benefits taking into account basic wage and D.A. Retention of the old basic wage, therefore, is an anomaly which requires to be removed; the earlier the better.

16.40 The current D.A. is not in all cases related to an index with a common base period. In many centres and industries it is linked to the total index, and several such indices have different base periods. We hold that if the basic wage in all cases is adjusted to a common base year and D.A. is linked to changes in the index over such a base year, the wage patterns in different centres would achieve a desired measure of uniformity. The Central Government through the Director, Labour Bureau, is currently preparing and publishing indices for different centres with the year 1960 as base. This suggests that wages could

1. In another chapter we have recommended how the index could be made acceptable to the users (See Paras 31.34 and 31.37).

be adjusted to the 1960 price level by merging D.A. in that year with the basic wage. But prices have gone up considerably since 1960 and a merger of the D.A. at that level would still leave a substantial component of the total wage as D.A. Further, there would be difficulty in cases of industries where wage board awards have already adjusted basic wages to more recent years.

16.41 We have been informed that prices are not likely to settle below the level of 1968. Spokesmen of the Planning Commission and the Reserve Bank of India, besides others, have been clear on this point. There can thus be a strong case for merging dearness allowance with basic wage at the 1968 price level. The main function of any D.A., as we envisage it, ought to be to provide a desired neutralisation of a temporary or short-period rise in the cost of living. Whenever the latter turns out to be more or less permanent, the wage rate itself should be adjusted to it. We are, therefore, most anxious that the D.A. should be merged with the basic wage at a reasonable point of time. We recognise that the merger is likely to have wide repercussions on industry and may require consideration of related wage issues on an extensive front. There is also the difficulty that in the absence of a price series related to the base year in which the two components of the wages are merged, the workers might have a feeling that any future erosion of their real wages would not be adequately safeguarded. We have taken note elsewhere of the enquiries proposed in the year 1969-70 for measuring changes in workers' levels of living and for providing a base for revising the price indices at different centres. It would, therefore, be more practical to merge D.A. with basic wage at the base year of the revised series. In the interim, we recommend that (i) all future wage claims should be dealt with on the basis of the 1968 price level and (ii) the ground should be prepared for introducing a consolidated wage (basic + D.A.) as at the base period of the proposed revised series of consumer price index numbers. The aim of such merger should be to rationalise the existing wage structure and make basic wage more realistic than at present. It should not be construed to imply *ipso facto* any basic change in real wages or conferment of any additional

benefit. The price-rates would have to be adjusted to the merged wage in such a way that current differentials in the total wages are not unduly disturbed. No further adjustments are implied in our proposals.

16.42 Compensation against decline in the purchasing power of money is claimed by all wage earning sections; the employees in the lower income brackets are the worse sufferers. They have little or no manoeuvrability. Extension of this protection to all employees may not be in accord with the principles enunciated earlier for framing wage policy. Employees in higher income brackets have to make a sacrifice in common with other sections of the population who do not get compensated for price rises. To draw a precise line where the D.A. should cease will depend on the level of prices at any point of time. The Dearness Allowance Commission, 1967, which went into this question in respect of Central Government employees, felt that in deciding the level at which additional D.A. should cease to be admissible, the following three considerations should be taken into account: (i) the level should be a little above but not substantially above the subsistence level; (ii) the level should be determined in relation to the current price level; and (iii) it may have to be determined afresh in future if price level went up substantially higher than the current level. These considerations, we feel, should be applied, *mutatis mutandis* to workers who fall within our terms of reference.

16.43 Many State Governments have preferred regional index numbers to the all-India index for making adjustments. A large body of evidence, particularly from industries and services which are spread throughout the country, however, favours the use of the all-India index. One central organisation of workers has preferred the all-India index in dealing with D.A. claims at the national level, but by and large workers' choice is for the local index. At present, the indices are available for individual industrial centres and for all-India. We have recommended elsewhere that such States as would like to have a State series may undertake enquiries at additional centres to



provide a base for the State index. In the meanwhile, the only choice open is as between the series for the centre and the all-India series. Each one has its uses. Taking the industrial field as a whole in its wider connotation, many wage boards have shown preference for all-India series. At the same time, it seems inappropriate to suggest that workers in centres where a local index has had a long tradition of being used should be made to change over to the all-India index. In any case, it would be best to leave it to the wage fixing authorities to choose the index (local or all-India) they consider suitable for the purpose of linking dearness allowance.

16.44 Several employers have urged that the index which represents the price rise for the consumption basket of an average worker should not be taken to regulate the D.A. paid for compensating those at the minimum level. In deciding this issue, it is necessary to appreciate that when D.A. is linked with an index, exact correspondence should not be expected between the group of employees whose D.A. is tied to the index and the group on whose family budgets the index is based. There is always an area of applicability for each index, the limits for which are wide for all practical purposes. Obviously it is not possible to maintain separate indices for employees in different wage ranges at different centres. The 1958-59 family budget enquiries show that about 60 per cent of the families surveyed had incomes below Rs 125, at the time the enquires were undertaken. The indices, therefore, predominantly represent workers in lower income brackets. They can be taken to be a good indicator for regulating D.A.

16.45 Also, in making the claim for working out a separate index for those drawing the minimum, the statistical points involved are generally ignored. The sample for the enquiry is designed in such a way that it will give an idea of the average consumption basket. If on the basis of the enquiry so planned one has to work out an index for those at the minimum level, the data collected will not be representative for that class. If, on the other hand, it is claimed that future inquiries should be restricted only to minimum wage earners, they

would cease to be working class family budget inquiries. Moreover, the index measures changes in the price of a fixed basket of goods and services. Marginal adjustment in weights of individual items, which will result if the employers' claim for calculation of the index on the basis of budgets of minimum wage earners is accepted, does not affect the index substantially. Also, the wage fixing authorities use the index only for understanding price changes. They work out the quantum of D.A. with a view to compensating the workers drawing the minimum in such a way that payment of D.A. does not amount to increase in real wage even at the minimum level.

16.46 Varying degrees of neutralisation, even at the level of the minimum wage, have been suggested by State Governments. While some would prefer cent per cent neutralisation at the lowest level, others demand maximum neutralisation at lower levels with a gradual tapering of as wage/pay scales improve. Several employers' organisations have relied on the Report of the Dearness Allowance Commission (1967) and have urged that the principles underlying the recommendations should be made more general in their application. Workers' organisations have unanimously voiced the demand for cent per cent neutralisation, some without indicating the wage limit, others confining it to persons at the lowest level. The existing practice in regard to percentage neutralisation on the basis of adjudication awards, wage board reports, etc., varies from place to place and from industry to industry. While in some centres and industries the percentage neutralisation is cent per cent at the lowest level, in others it is less. But whatever the rate of neutralisation, it has been generally egalitarian in its application, since the percentage neutralisation for price rise in the lower brackets of wages or salaries is generally higher.

16.47 It is obvious that unless money wages rise as fast as the consumer prices, it would result in an erosion of real wages. But the extent of its impact will depend on the margin of cushion available at different levels of income. The purpose behind the fixation of minimum wages itself is lost, if the wage so fixed is allowed to be eroded

by price increases, exceptional circumstances apart. We are, therefore, of the view that on principle, those who get a minimum wage will be entitled to have full neutralisation against rise in cost of living. There are, however, certain imponderables like natural calamities, famine and external relations which have to be taken into account in deciding what allowance should be made for them in working out full neutralisation. These are admittedly difficult of quantification. Some of us took the view that for reasons set out by the Dearness Allowance Commission in its report, its recommendation that neutralisation at the rate of 90 per cent should be allowed to those at the minimum should be accepted by us, while others thought that the allowance for imponderables should be less. After full discussion consensus was reached that neutralisation at the rate of 95 per cent should be afforded to minimum wage earners in respect of any future rise in the cost of living. We accordingly recommend that 95 per cent neutralisation should be granted against rise in the cost of living to those drawing minimum wage in non-scheduled employments.

16.48 As pointed out earlier, minimum wages in non-scheduled industries have been fixed as a result of collective bargaining, arbitration or adjudication. The percentage neutralisation of the rise in the cost of living in non-scheduled industries has been fixed by the same process. We are aware that in some non-scheduled industries and units, dearness allowance is paid to the worker on the basis of neutralising in full the rise in price in case of persons at the minimum level. Our recommendation of 95 per cent neutralisation for minimum wage earners in non-scheduled industries should not be allowed to have any adverse effect on such agreements or on award rates of dearness allowance. The higher rates of neutralisation already achieved should be protected.

16.49 A suggestion that has been before us is that only the quantum of D.A. permissible to the lowest paid employee should be paid to those at higher levels of wages/salaries to whom D.A. may be admissible. The justification for it is sought in

its simplicity, and in the argument that the principle aim of D.A. being to compensate only the increases in the prices of essentials, it should not vary with income level. On the other hand, some others argue that payment of a flat amount of D.A. is responsible for a substantial narrowing of wage differentials and such narrowing down acts as a disincentive to improve effort and affects production and productivity, particularly in the case of skilled workers. On this account, it is claimed that while percentage neutralisation may taper off beyond the minimum, at higher levels it need not necessarily result in the payment of same amount of D.A. at all levels. This, however, assumes that the current differentials are justifiable on grounds of productivity and that our commitment to a socialist pattern of society will not eventually abridge these distances. There is little justification for these assumptions. According to our view, the only purpose of dearness allowance is to enable a worker in the event of a rise in cost of living to purchase the same amount of goods of basic necessity as before. This purpose would be served by an equal amount of dearness allowance to all employees irrespective of differences in their emoluments. But those employees, who are at present getting an amount of dearness allowance higher than what is admissible on the basis of our recommendations, will not be deprived of that, though for any additional increases in the cost of living, they will be entitled only to the same amount of dearness allowance as is given to persons receiving the minimum wage.

16.50 Several State Governments, Employers' Organisations, and Employing Departments of Government, have suggested revision of D.A. after a 10 point rise in the index or once in six months, whichever is later. Some State Governments and workers' organisations feel that the revision should take place after a 5 point rise in the index or once a quarter. There is also a substantial evidence from the workers' side in favour of a point-to-point adjustment. Many employers do not want adjustments except on an annual basis. Our Study Group on Wage Policy prefers automatic adjustment of D.A., but considers month-to-month adjustment undesirable.

According to it 'the management should have some reasonable stability in wage costs without at the same time imposing too heavy a burden on the worker at the subsistence level'.<sup>1</sup>

16.51 On this point, the main controversy appears to be between point-to-point adjustment or adjustment from slab to slab. The size of the slab itself, whether it should be 5 points or 10 points (in either case, 1960=100) is another area for decision. The index is a statistical measure, and as all statistical measures are, it is subject to a margin of error. While this factor could go against making a point-to-point adjustment, such adjustment would still be made possible by taking the average of the preceding 12 months at the time of adjustment. This, however, does not settle the controversy over slab versus point. The point in favour of more frequent adjustment is that additional D.A. will not be noticed by the market, though this argument is true only within limits. The slab would work better for reasons which have been explained in the report of the Dearness Allowance Commission. We, therefore, recommend linkage of D.A. to a 5 point slab (with reference to consumer price index Base 1960=100) on the basis of the current all-India series or the current (1960) centre series. However, this recommendation should not affect employees who are at present getting point-to-point neutralisation.

16.52 Almost all State Governments, employers' organisations and the Secretaries to Government of India have observed that capacity to pay is a very important consideration in fixing the amount of D.A. Workers' organisations, on the other hand, do not consider it to be relevant. As mentioned earlier, we do not feel that the capacity to pay is a relevant consideration for payment of D.A. at the minimum level. At other levels, or where D.A. is fixed on the basis of collective bargaining or other methods, the capacity to pay will have a bearing.

## CHAPTER 17

### INCENTIVES AND BONUS

The systems of remuneration for work in industry are, in the main, variants or combinations of two fundamental arrangements; payment by time and payment by output. Under the former, a worker is paid a pre-determined amount for a specified unit of time. Which may be an hour, a day, a week or a month; yearly payments are not common in industry. So long as he is engaged on tasks specified by his employer, there is no direct control on the amount of work done by him except through supervision. In the latter arrangement, the worker is paid his dues according to his output, or the output of the group he belongs. This relationship may be simple when the remuneration is for a straight piece work, i.e., a uniform rate per unit of work done/output. It may assume complex forms as in the case of 'differential piece work' wherein rates of remuneration per unit of output may be either progressive or regressive. Long-term collective systems relating wages to costs, standard production, sales or profits are other variants of payment by results. There are also other types of remuneration that are not directly dependent on production, like bonuses for regular attendance, length of service, quality of production and elimination of waste, all constituting an area of wage incentives.

17.1 There are advantages in incentive payments. They serve a double purpose, viz., (i) to increase the earnings of the workers and (ii) to improve the efficiency of the unit, thereby lowering costs. If properly worked, they could have an effect on prices in a manner which will benefit the community. On the debit side, the use of a system of payment by results accentuates the differences between the management and unions. While incentives provide additional remuneration for workers as production proceeds from day to day, another mode of such payment has come in vogue which may depend upon the total output of the unit as also on the state of the market, viz., payment of bonus. We propose to discuss in this Chapter some of the incentive schemes which prevail in this country and the manner of their introduction/implementation. In the latter portion, we review the system of bonus payments.

1. Report of the Study Group on Wage Policy, p. 47.

## INCENTIVES

**Historical**

17.2 Incentive systems in the industrially advanced countries date back to the introduction of scientific management in the closing years of the 19th century. Since then numerous schemes have been evolved; a wide variety of them are now in force in different parts of the world. Wage incentives tend to assume greater significance in a framework of planned economy. They encourage workers to accept technological improvements resulting in increased production for the economy and better standards of living for the workers. It was in this context that both the First and the Second Plans recommended the introduction of incentives to promote more efficient working in industries with due safeguards to protect the interest of workers, through the guarantee of a minimum (fall-back) wage and protection against fatigue and undue speed-up. The Second Plan also recommended that earnings beyond the minimum wage should be necessarily related to results and workers should be consulted before a system of payment by results was introduced in an establishment. The Third Plan emphasised the need for higher productivity and reduction in the unit cost of production. It put the responsibility on the management to provide the most efficient equipment, correct conditions and methods of work, and adequate training and suitable psychological and material incentives for the workers. There has been, however, no evidence of systematic implementation of these recommended measures. Whatever has been achieved in last twenty years is the result of the efforts of individual employers or employer groups. Research institutes also have helped this limited effort by conducting scientific studies on work methods in industries - sometimes in collaboration with workers - and by publishing technical literature on the subject.

**Labour Bureau Findings**

17.3 The piece-rate has been known in our country for a long time and widely practised too. It does not strictly amount to an incentive scheme,

but is connected with it. According to the Occupational Wage Survey conducted by the Labour Bureau in 1958-59, 31.8 per cent of the workers in factory industries, 75.4 per cent in plantations and 57.8 per cent in mines were piece-rated. Application of the piece-rate system has been understandably limited to industries and occupations in which it is possible to measure the output of a worker or a group of workers with reasonable accuracy and to maintain a satisfactory degree of control over the quality of the product. A variation of the straight piece-work system is the standard-hour system under which a certain standard time is allowed to the worker to complete a particular job and he is paid for the standard time even if he completes the work before time.

17.4 The Labour Bureau made a study of incentive schemes other than the straight piece-rate system, operating in industrial units during the period 1956-57. The Study revealed that incentive schemes were predominant mostly in iron and steel, aluminium, engineering, cement, paper, cigarette, textiles, chemicals and chemical products, mining and glass industries and most of these schemes had been introduced during or after 1946. In more than half the units surveyed, incentive plans were stated to have been formulated in consultation with the workers concerned. The group system of incentive payment was more common than the one with individual incentives. In large undertakings, particularly in iron and steel, aluminium, paper and match industries, incentive payments were linked to the total production of the plant or the unit as a whole. Incentive schemes related to the productivity of individual workers or groups of workers existed in engineering and cigarette manufacturing industries. The one prevalent in gold mines, some cement and glass factories and printing presses, stipulated incentive bonus to workers for performance over and above the prescribed norm. The practice of making a distinction, for incentive bonus, between persons directly engaged in production and others was not uncommon. Where both groups were entitled to such payments additional remuneration to the non-production personnel was usually at a rate lower than what

production workers could claim. The periodicity of payment varied from a fortnight to a year depending upon the type of incentive scheme.

### **The N.P.C. Study**

17.5 Among more recent attempts to understand the position was an inquiry undertaken by the National Productivity Council (NPC). The response to the enquiry was generally poor. Of the 85 establishments which responded out of the 1,000 addressed, 60 had one type of incentive scheme or the other. The reporting establishments covered several industries including light and heavy engineering, textiles, aluminium, chemicals and mining. About a third of them had a straight piece-rate system without a 'fall-back' wage. In the remaining, arrangements for 'fall back' payments operated. While incentives restricted to production personnel only was the common pattern, in about a third of the units the schemes were applicable to nearly all workers. In some others, about one-fourth to one-half of the work force benefited from incentives. In all cases, the incentive bonus was related to output. Other factors which figured in the calculation were quality, regularity in attendance, reduction in waste, and reduction in break-down repairs. Non-monetary incentives, among which promise of promotion was one, operated in some units.

### **Public Sector Arrangements**

17.6 A team of Russian experts studied the applicability of incentive schemes to public sector undertakings in the year 1960. According to it, the then existing wage system in public undertakings was not based on the efficiency of the workers, but on their length of service and was anomalous in as much as workers doing identical work in quality and quantity got different wages. The team suggested the desirability of reducing the wage differentials for similar occupations and relating wages to skills required of labour and the equipment operated by them. It felt that the system of fixing wages on the basis of seniority should be progressively done away with by switching over all workers to a system of payment based on quality, skill and quantum of labour.

Since achievement of the desired output depended on the effort of engineers and technicians as well as that of the personnel of administrative departments, it recommended payment of bonus to them as well. The creation of fund out of the profits and savings resulting from increased production in the undertaking for welfare activities and improvements in production equipment was another suggestion. A recent study of labour in selected public sector undertakings reveals that productivity has been progressively increasing and unit costs falling in the Chittaranjan Locomotive Works where incentive schemes have been in operation since 1954. The Indian Telephone Industries, Bangalore, has a system of incentives by which both operatives and other benefit. Persons whose time is not directly booked on a job, i.e., operatives in the service departments and service shops, are also covered by the scheme. Among the other public sector undertakings which have such arrangements are the Hindustan Steel Ltd., the Hindustan Antibiotics and the Hindustan Machine Tools.

### **Experience of Wage Boards**

17.7 The wage boards set up for different industries are required by their terms of reference to bear in mind the desirability of extending the system of payment by results in evolving a wage structure, subject to safeguards against over-work and undue speed. In dealing with this aspect, the First Wage Board for the Cotton Textile Industry observed that both the employer and employees disfavoured any system of progressive rates of incentives. They were satisfied by the system of piece-rates that covered over 50 per cent of the workers. The Sugar Wage Board found little scope for incentive wage system in that industry. A similar finding was recorded by the Cement Wage Board, since it found individual or even group performance in cement factories was not measurable. No extension of the piece-rate system was recommended by the Coal Wage Board because of 'certain inhibiting factors in the very nature of production in the industry'. On the other

hand, incentives through extension of piece-rates were recommended by the Wage Boards for Jute, Rubber, Coffee and Tea.

### Our Approach

17.8 The Study Group<sup>1</sup> on Productivity and Incentives, appointed by us, has pointed out that under our conditions, wage incentive is concerned with effective utilisation of manpower, which is the cheapest, quickest surest means of increasing productivity. The only practicable and self-sustaining means of improving man-power utilisation is to introduce incentive schemes and stimulate human exertion to provide a positive motivation to greater output. The evidence before us supports the basic approach of the Study Group, though there is an understandable variation in the emphasis put by employers' and workers' representatives on its different aspects. There is a general agreement that incentive schemes should be applied to all sectors of economic activity. The following guide-lines for introduction of incentive schemes, on which we had sought views through our questionnaire, have found general acceptance. We recommend their adoption:

- (a) Employers and workers should formulate a simple incentive system at the unit level and implement it on some agreed basis through collective bargaining. In every case, introduction of incentive schemes should be preceded by an agreement with trade unions.
- (b) In evolving wage incentive schemes, it should be ensured that these do not lead to rate-cutting. The worker's normal wages should be protected where it is not possible for him for circumstances beyond his control to earn an incentive.
- (c) Individual or group incentives can be framed to cover both direct and indirect groups of workers.
- (d) An incentive scheme cannot be evolved without a work-study undertaken with the cooperation of workers. Nevertheless, it should always be open to employers and workers to evolve a scheme by agreement or on any other acceptable basis.
- (e) Efforts should be made to reduce time-rated categories to the minimum. This will ensure that all employees have an equal chance to increase their earnings with increase in productivity.
- (f) Wage incentives should generally provide extra earnings only after a mutually agreed level of efficiency has been achieved.
- (g) To ensure quality of production, incentive payments should be generally allowed only if the output has been approved on inspection by the management. Relevant norms in this connection should be laid down and made known to workers.
- (h) Incentive earnings should not fluctuate very much. This requires a certain degree of planning so that material delays, machine-breakdowns, etc., are controlled.
- (i) The scheme should itself safeguard adequately the interests of the worker if he is forced to remain idle due to circumstances entirely beyond his control such as non-supply of raw materials and machine breakdowns.
- (j) Apart from financial incentives, non-financial incentives like better security of employment, job satisfaction and job status have also a place in increasing productivity.

17.9 Apparently, incentive schemes cannot be introduced to cover all occupations in all industries. The application of such schemes has generally to be selective and limited to industries and occupations in which it is possible to measure, on an agreed basis, the output of workers or groups of workers concerned in which it is possible to maintain a fair degree of control over the quality of production. Two of our Study Groups on individual industries<sup>2</sup> have specifically brought out this issue. It has been suggested to us that

1. Report of the Study Group on Productivity and Incentives, p. 38.

2. Study Group on Oil Refining and Distribution and Study Group on Cotton Textile.

industrial units which have been recently set up in the country have taken advantage of modern technology; the scope for introducing incentive schemes in them would be more limited than in older ones. Heavy Chemicals, oil refining, fertilisers, etc., may not have much scope for production incentives. Due to the highly capital-intensive techniques of several of these industries, proper maintenance of plant and equipment representing heavy investment is equally necessary and this offers extensive scope for introduction of incentive schemes.

17.10 The question of a guaranteed minimum or a fall-back wage assumes considerable importance if workers are expected to speed up production. Production should not be organised in a manner which will give incentive wage on one day and unemployment on the next. A 'fall-back wage' can be a safeguard against it. This principle seems to have found general acceptance everywhere. Workers' organisations have represented to us that workers should not be made to suffer if employers fail to provide good material and machinery. Compensation for such default or shortcoming on the part of employers should be on the basis, not of a fall-back wage, but of what the worker would normally have earned. To us, this seems to be a matter of detail. When the principle of close consultation with workers' representatives is accepted, we feel that given goodwill on both sides, an essential pre-requisite of the successful operation of any incentive scheme, or for that matter, of any other scheme is fulfilled. The fixation of the quantum of fall-back wage is, therefore, not a matter that cannot be mutually settled.

17.11 Determination of the 'Base' for introduction of incentives is another area of debate. If after scientific productivity studies on the shop floor carried out on an agreed basis, it is established that the present level of performance is only 'X' per cent of the standard level of performance taken as 100, should this 'X' per cent become the 'base' for calculations of gains in productivity? Or should some other 'level' be taken as the

'base'? We reproduce below two guiding principles which have found favour in the Report of a tripartite Committee on Sharing the Gains of Productivity:

- (i) The norms should be fixed in an objective manner so as to be accepted by both management and labour; for this purpose, independent organisations like trusted management consultants should be increasingly employed.
- (ii) The productivity norms should bear some 'optimum' relationship with payments; if incentives involve very large payments, management may not be interested in sustaining productivity increases, but if they result in very small payments, labour may not likewise be interested.<sup>1</sup>

The reaction of either side to an incentive scheme will depend upon what the scheme would bring by way of benefit, which is a function both of the rate of incentive and the 'norm' against which the incentive has to be worked out. This also can be a matter where dialogue between the parties with a determination to settle can provide an answer.

17.12 We are of the view that a careful selection of occupations should be made with the assistance of work study teams, the personnel of which commands the confidence of both sides. Schemes should be evolved after detailed scientific studies and application of agreed industrial engineering techniques. They should cover as many employees of an undertaking as possible and need not be confined only to operatives or direct workers. The inclusion of the supervisory personnel as beneficiaries of incentives can have a vital role in improving efficiency; together with maintenance personnel they can make or mar the scheme. The scheme should be simple so that workers are able to understand its full implications; it should ensure their enthusiastic cooperation in its successful implementation. Management should take steps to guard against the impact on incentive schemes of certain

1. Report of the Committee on Sharing the Gains of Productivity, March 1967, National Productivity Council, Pp 8-9.

unfavourable external factors such as non-availability of raw materials, components, transport difficulties, and accumulation of stocks. Workers' attitude towards accepting incentives is indeed conditioned by these factors much more than by the rest. Adequate machinery should also be made available for settling workers' grievances relating to the adverse effect of environmental arrangements on their work and earnings. Rate modifications consequent upon a change in job content, methods, organisation, etc., should be made, as far as possible, in agreement with the workers. Also, workers' representatives may be associated with various stages of work measurement, job evaluation and work studies. According to the NPC study team which visited West Germany, U.S.A. and Japan, this system is prevalent in West Germany where incentive rates are freely negotiated with labour unions.

### Responsibility of Government

17.13 We need hardly emphasise that the central aim of all incentive schemes is to raise productivity in the establishment. In this matter, the responsibility of employers is indeed primary. It is they who have to seek the necessary response from workers. Since productivity improvements will be beneficial to the community, Government as the custodian of the interests of the community will have its share in promoting productivity and, in the process, in building up incentives which would help such promotion. Our Study Group on Productivity and Incentives has examined this point in some detail and suggested that:<sup>1</sup>

- (i) The Government must pursue policies which will contribute to the growth of a social, political and economic climate in the country conducive to the rapid and continuing growth of production and equitable distribution of the same.
- (ii) The objective of increasing productivity must be raised to the level of a high national purpose and the regulation of industrial relations as well as policies in other related fields should be oriented towards this

objective. Especially, it must be ensured that the workers get their due share in the benefits of rising productivity and their status in the social and political set-up in the country is paid due attention.

- (iii) The Government must take purposeful steps to improve the nutritional standards and living conditions of workers so as to raise their productivity.
- (iv) The industrial relations legislation and administration in the country should be so conceived as to promote sound collective bargaining even at the risk of some possible industrial conflicts.
- (v) Specialised bodies working in the field of productivity, like the NPC, the LPCs (Labour Productivity Committees), the training institutes in productivity, etc., should be provided the means to extend their activities at the shop-floor level
- (vi) Research in all aspects of productivity needs to be promoted and encouraged on the widest possible scale so that approaches and methods best suited to Indian conditions can be developed and made available to industry. The public sector should play a particularly active role in this respect.
- (vii) The Government should provide specialised, technically competent, independent and impartial agencies to assist employers and trade unions in handling productivity problems and resolving disputes arising therefrom.

We are in agreement with most of the suggestions. It is not our intention to elaborate on them at this place since each one of these ideas forms the subject matter of our field of enquiry. We only take up items (i), (ii) and (v).

17.14 We are sure that Government's policies will be increasingly directed towards the objectives mentioned in (i). It is possible that in a democratic system, there would be healthy differences of opinion on many issues between the party in power and other political parties. But we presume that no party is antithetical to development, although there would always be

1. Report of the Study Group on Productivity and Incentives, Pp. 79-81.



difference in regard to specific measures or strategies. Even then we hope that the goal of planned economic development will be kept above party politics.

17.15 We support fully the sentiments expressed in (ii). High productivity and any scheme which helps in improving it has to be raised to the status of a national purpose. They have to reach out far a-field wherever a man or a woman is at work. This again is a matter which requires cooperation on all sides.

17.16 In regard to (v), we recognise the need for a good deal of field support for the activities of an organisation like the NPC. This support has to be attracted by the programmes drawn up by the organisation itself. It must conclusively prove, in a society like ours that wares it is seeking to popularise can really make an impact. This does not mean that the support from Government for such activities is not essential. In fact, such support has always been there from the Government, though one may feel that it has not been adequate. What is, however, more important is the support for such activities from the community at large.

#### BONUS

17.17 The dictionary meaning of the word 'bonus' is 'something to the good', 'especially extradividend to the share-holders of a company', 'distribution of profits to insurance policy-holders' or 'gratuity to workmen beyond their wages'. It is the last meaning of the word which has acquired significance for labour management relations in India. Till recently, bonus was regarded an *ex-gratia* payment made by the employer to his workers to provide a stimulus for extra efforts by them in the production process; on occasions it also represented the desire of the employer to share with his workers the surplus generated by common endeavour and enterprise. From this limited connotation of the word, we have travelled a long way to reach the stage of

enactment of the Payment of Bonus Act, 1965, which makes this annual payment obligatory on the employer.

#### Historical

17.18 Payment of 'bonus' in the proper sense of the term, could be regarded as having started during the closing period of the First World War. The Whitley Commission in discussing this issue observed:-

'We do not desire to imply that, with his existing standard of efficiency, the worker has always obtained in the past a fair share of the results of industrial enterprise or that he always does so now; but so long as his organisation is as weak as it is today, there will remain a danger of his failing to secure a just share of the results of industry. Suggestions have been made from time to time that the difficulty might be met by the general adoption of profit sharing schemes, but this movement has made practically no progress in India and, in the present stage of industrial development, such schemes are unlikely to prove either useful or effective'.<sup>1</sup>

17.19 In the situation which developed during the Second World War, war-time bonus came to be regarded as a payment made to workers out of the extraordinary profits earned during the war. The Indian Labour Conference, 1943,<sup>2</sup> after a discussion on profit sharing bonus, concluded that the question of bonus should be treated separately from that of dearness allowance and that primarily it was a question to be settled by employers in consultation with their employees. Though several employers paid bonus voluntarily, many disputes on the issue were referred to adjudication under the Defence of India Rules. The adjudicators took the view that profits were made possible by the cooperation, both of the labour and capital. Labour, therefore, had a right to share in increased profits in any particular period. The claim to bonus was still not a legal right, but was accepted chiefly on grounds of broad principles of justice,

1. Report of the Royal Commission on Labour, 1931, p. 210.

2. Tripartite Conclusions 1942-67, p. 12.

equity and good conscience with a view to keeping labour contented.<sup>1</sup> The position as stated above continued until the Bombay High Court laid down that payment of bonus could be demanded by workers as a right, that is to say, a payment which should be made by the employer as extra remuneration for work done by the employees under a contract, express or implied.<sup>2</sup>

### The Committee on Profit Sharing

17.20 The Indian Labour Conference held in April 1948, while discussing the subject of profit-sharing, observed that the issue was such as would need expert examination. The Government of India appointed the Committee on Profit Sharing to advise them on the principles to be followed for the determination of: '(a) fair wages to labour; (b) fair return on the capital employed in the industry; (c) reasonable reserves for maintenance and expansion of the undertaking; and (d) labour's share of the surplus profits, calculated on a sliding scale normally varying with production, after provision has been made for (b) and (c) above'. The Committee did not find it possible to devise a system in which labour's share of profits could be determined on a sliding scale correlating it to production and observed: 'An experiment in profit-sharing on wide scale would, therefore, be definitely undertaking a voyage on un-chartered (uncharted) seas'.<sup>3</sup> The Committee, however, suggested that profit-sharing on an experimental basis might be tried in the following well-established industries:

- (a) Cotton Textiles.
- (b) Jute.
- (c) Steel (main products).
- (d) Cement.
- (e) Manufacture of Tyres.
- (f) Manufacture of Cigarettes.

The reason behind the recommendation for an experiment in profit-sharing was that it would promote industrial peace. The Committee also observed that the responsibility for ascertaining surplus profits and certifying that they had been disbursed according to law, should be laid squarely on the duly appointed auditors of the concerns. The Report of the Committee was considered by the Central Advisory Council, but no agreement could be arrived at. In practice, profit sharing continued in the form of periodic bonuses awarded by industrial courts and tribunals. No uniform or clear-cut basis was, however, discernible in their awards.

### The L.A.T. Formula

17.21 It was against this background that the short-lived Labour Appellate Tribunal (LAT) had to evolve principles for bonus payment. In its award on the dispute in the textile industry at Bombay in 1950, the LAT laid down the main principle involved in the grant of bonus to workers and observed as follows:-

'It (bonus) cannot any longer be regarded as an *ex-gratia* payment, for it has been recognised that a claim for bonus, if resisted, give rise to an industrial dispute which has to be settled by a duly constituted Industrial Court or Tribunal'.<sup>4</sup>

In another case,<sup>5</sup> it elaborated the considerations which should govern the quantum of bonus by stating:

'It is the consistent policy of this Tribunal to grant to the workmen a scale which is in accord with the trend of wages and also with the capacity of a concern to pay, and if possible to supplement it with bonus out of available surplus of profits. These matters have to be determined on principles and not on haphazard considerations; for should

1. cf. Judgements delivered by Justice M.C. Chagla in the case of General Motors (India) Ltd. and (versus) the Workmen and Standard Vacuum Oil Company vs. its employees (referred to at page 5 of the Bonus Commission Report).

2. Indian Hume Pipe Co. vs. E.M. Nanavutty (48 Bom. LR 551).

3. The Report of Committee on Profit Sharing, p. 7.

4. LAT (1950) II LLJ 1,247.

5. Metal Box Company of India Ltd v. Their Workmen (1952), I.L.L.J., p. 822.

we depart from principles there will be no consistency in labour decisions; and it will be harmful to industrial relations if decisions are built on shifting sands of uncertainty'.

According to the formula laid down with reference to the first case and which came to be known as the 'Full Bench Formula', the surplus available for distribution has to be determined by debiting the following prior charges against gross profits:

- (i) Provision for depreciation,
- (ii) Reserve for rehabilitation,
- (iii) Return of 6 per cent on the paid-up capital, and
- (iv) Return on the working capital at a lower rate than the return on paid-up capital;

and from the balance called 'available surplus', the workmen were to be awarded a reasonable share by way of bonus for the year.

17.22 The formula laid down by the LAT was followed all over the country by industrial tribunals in awarding bonus, though demand for its revision continued to be made from time to time. The main point on which this revision was sought centred round the provision for rehabilitation accepted by the LAT as a prior charge. This issue came up for consideration by the Supreme Court in an appeal from the Associated Cement Companies in 1959. The Supreme Court, while upholding the principles underlying the LAT formula, observed *inter alia*:

'if the legislature feels that the claims for social and economic justice made by labour should be re-defined on a clearer basis, it can step in and legislate in that behalf. It may also be possible to have the question comprehensively considered by a high-powered Commission which may be asked to examine the pros and cons of the problem in all its aspects by taking evidence from all industries and bodies of workmen'.<sup>1</sup>

### The Bonus Commission

17.23 The bonus issue came up for discussion before the Standing Labour Committee in 1960. The Committee recommended that a Bonus Commission should be set up to go into the question of profit bonus in a comprehensive manner; the terms of reference of the proposed Commission were also settled by the Committee. Internal discussions within Government led to the inclusion of the public sector within the purview of the terms of reference of the proposed Commission.

17.24 Apart from its endorsement of the concept that bonus could be claimed as a matter of right by workers, the Bonus Commission's formula rested on the procedure recommended by it for calculating the 'available surplus' and the workers' share in it, as indeed on the steps it envisaged for maintaining a continuity in such payment over a period. The main elements of these are:-

#### A: The 'available surplus'

- (i) The computation of gross profits for the year is the first step
- (ii) Deduction will be made from the gross profits on account of the following prior charges:
  - (a) Depreciation as admissible under the Income Tax Act.
  - (b) Income Tax and Super Tax.
  - (c) Return on the actual rate payable on the preference share capital and at 7 per cent on paid-up capital.
  - (d) Return on reserves and surplus at 4 per cent.

The balance left after deduction of the above prior charges from the gross profits will be the 'available surplus'.

#### B: Distribution of the 'available surplus'

- (i) 60 per cent of the 'available surplus' shall be allocated to bonus to be distributed to workers.

1. Supreme Court (1959), L.L.J., Vol. I, p. 644.

- (ii) However, if the 'available surplus' (or even where the surplus is negative) is less than the amount required for distribution - 4 per cent of the annual basic wage plus dearness allowance or Rs 40 per individual, whichever is higher - a minimum bonus will be a charge on the industry.
- (iii) By the same logic, a maximum equivalent to 20 per cent of the annual basic wage and dearness allowance was also fixed.

*C: The system of 'set on' and 'set-off'*

- (i) Where the amount allocable as bonus exceeds the maximum, i.e., it exceeds the equivalent of 20 per cent of the workers' earnings, then the excess upto a limit of a further 20 per cent is to be carried forward to be 'set on' in the succeeding years upto a maximum period of four years.
- (ii) Where there is no available surplus or the amount of the available surplus allocable as bonus is a sum less than 4 per cent of the annual earnings (as in B(ii) above), then the whole of the quantum of 4 per cent or the amount necessary to make up 4 per cent, as the case may be, should be carried forward and 'set-off' in the succeeding years upto a maximum period of four years.

*D: Public Sector*

- (i) The formula applies to those public sector undertakings which are not departmentally run and which compete with establishments in the private sector.
- (ii) If not less than 20 per cent of the gross aggregate of sales turnover of a public sector undertaking consists of sales of services and/or products which compete with the products and/or services produced or sold by units in the private sector, then such undertakings should be deemed to be competitive.

*E: Exemptions as a result of agreements between parties*

- (i) Where in particular undertakings, the

employers and the unions have adopted or, in future, opt for annual bonus linked with production or productivity, in substitution of bonus based on profits, the Commission's formula would have no application.

- (ii) Where industry-wise agreements already exist, the parties are at liberty to renew the agreements. With such modifications, if any, as may be agreed to by them. If the employers' and workers' associations can agree to make or continue industry-wise agreements on a basis acceptable to them, the formula recommended by the Commission would not apply.

*F: Concessions for new concerns*

- (i) The formula will not apply to new concerns until they have recouped all early losses, including all arrears of normal depreciation admissible under the Income Tax Law, subject to a time limit of six years.

*G: Mode of Payment*

- (i) Bonus shall be payable in cash.

*H: Retrospective effect of the recommendations*

The recommendations of the Commission would apply to all bonus matters relating to an accounting year ending on any day in the calendar year 1962, other than those cases in which settlements have been reached or decisions have been given.

17.25 The Chairman, two independent members, both the representatives of labour, and the representative on the behalf of public sector management agreed to all recommendations. The representative of the private sector employers added a minute of dissent. According to him:

- (a) in calculating 'available surplus', besides Income Tax and Super Tax, the Super Profits Tax should also be allowed as a prior charge;

- (b) a suitable allowance on account of rehabilitation (wasting assets allowance in case of mines and replanting allowance in case of plantations) should be allowed as a prior charge;
- (c) the rate of return on capital to be allowed as a prior charge should not be less than 8.5 per cent for paid-up capital and 6 per cent for reserves; and
- (d) the bonus formula should not be applied in its full rigour to the jute industry, plantations, coal mining industry and other mining industries. In the case of those industries, the limits of minimum and maximum bonus should be fixed at 2 per cent and 10 per cent of the basic wages and dearness allowance as against the limits of 4 per cent and 20 per cent in the case of other industries.

17.26 The Government of India announced, on September 2, 1964, their acceptance of the Commission's recommendations, subject to the following modifications:

- (a) all direct taxes should be deducted as prior charges in the calculation of the available surplus;
- (b) the return on paid-up capital should be 8.5 per cent (taxable) and the return on reserves 6 per cent (taxable);
- (c) tax concessions and subsidies given to industry should not be utilised for payment of larger bonus to employees; and
- (d) the recommendations should apply with retrospective effect to all pending bonus disputes in respect of the accounting year ending in 1962.

17.27 The Union Labour Minister, in the course of a statement made in Parliament on September 18, 1964 announcing Government's decision on the Bonus Commission Report, clarified that in the legislation to be promoted to give effect to the recommendations of the Bonus Commission as accepted by Government, suitable safeguard

would be included so as to enable labour to get the benefits on the existing basis or on the basis of the new formula, whichever was higher.

### The Bonus Act

17.28 The Bill to give effect to the recommendations of the Bonus Commission as accepted by Government was discussed by the Standing Labour Committee in March 1965; there was no agreement on it. The Labour Minister thereupon announced that Government would go ahead with the proposed bill keeping in view the opinion expressed by different parties. An Ordinance for regulating payment of bonus was issued in May 1965 and was later replaced by the Payment of Bonus Act, 1965 in September of that year. The Act applies to every factory as defined under the Factories Act, 1948, and to every other establishment which employs 20 or more persons. Those public sector undertakings which are not run departmentally and which compete with establishments in the private sector to the extent of 20 per cent are also covered by the Act.<sup>1</sup> In the case of new establishments, whether set up before or after the commencement of the Act, bonus would be payable for the accounting year in which the employer derives a profit from such establishment or after the sixth accounting year in which the products manufactured by the establishment are sold, whichever is earlier. According to the Act, the salary or wage of a worker includes basic wage and dearness allowance only. The benefits of bonus extend to all employees receiving a salary or wage of upto Rs 1,600 per month. The Act also requires that a minimum of 30 days' work in a year has to be put in to qualify for payment of bonus; and it provides for a reduction in the amount of bonus payable to those who work for less than the stipulated number of days during an accounting year. The available surplus in respect of an accounting year is to be computed after deduction of certain prior charges from gross profits. The prior charges

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1. Even in the case of non-competing Public Sector Undertakings, it was decided subsequently by the Government that bonus under the Bonus Act should be paid to workers *ex-gratia*.

include depreciation, direct taxes, return on capital, remuneration for working partners and proprietors, 60 per cent of the available surplus (67 per cent in the case of foreign companies) is allocable for payment of bonus to employees in each accounting year.

17.29 As the debate on the propriety of the Government not accepting fully the majority recommendations continued and even a search for a new formula was on, the constitutional validity of the Payment of Bonus Act, 1965, was challenged in the Supreme Court through two petitions under Article 32 of the Constitution and a Civil Appeal against the decisions of the Industrial Court, Maharashtra. The Supreme Court upheld<sup>1</sup> the Act; its provisions relating to minimum bonus and system of 'set on' and 'set-off' were kept intact. But the main safeguard for which labour had fought, namely, the choice by labour of the formula which was to its advantage as provided for in Section 34(2) was not sustained. Section 33 (applicability to pending disputes) and Section 37 (powers of the Government to remove difficulties) were also struck down.

17.30 The Payment of Bonus Act, 1965 was amended in March 1969 for increasing the amount of available surplus. According to this amendment, the available surplus is to be so computed that the amount of the rebate accruing to the employers on account of bonus paid or payable under the Act, becomes a part of the available surplus of the succeeding year, instead of being diverted entirely to employers as was the case before the amendment was passed.

### Recommendations

17.31 Bonus which was originally a voluntary payment has, under the Payment of Bonus Act, 1965, become a statutory obligation. A minimum bonus is now taken for granted by workers in the organised industrial sector as a part of their emoluments. The employers, too, keep it in mind while making their calculations of the total wage

bill. It has thus become a necessary adjunct of wages. Its replacement, viz., wage adjustment, would not be practicable on account of its being an essential component of workers' expectations. After each such adjustment, fresh claims for bonus would arise. We are, therefore, of the view that the system of annual bonus has come to stay and may continue in future. This view is supported by the evidence before us. Employers' organisations have not seriously debated the *raison d'être* of bonus, but have by and large suggested changes in the formula which would be favourable to them. They have, however, reiterated their objection to the payment of minimum bonus. In the interests of industrial peace, we feel that while the quantum of bonus can be left to be determined by collective bargaining, the formula which may serve as a guideline for such settlements has to be statutory. Details regarding the calculation of 'available surplus', as also the minimum and the maximum limits placed on the quantum of bonus, have been areas of controversy. While employers would like the upper limit to be retained the lower removed, workers have urged that the lower limit should be maintained but without an upper limit. Several unions have argued in favour of giving effect to the majority recommendations of the Bonus Commission.

17.32 The payment of Bonus Act, 1965 was enacted only recently. In all fairness, it should be given a longer period of trial. Some workers' organisations and their leadership may not favour this suggestion, as they have been publicly voicing their opposition to the functioning of the Act as it has emerged after the Supreme Court judgement. Their main objections are in respect of the coverage and quantum of available surplus. Bonus payment already covers a very large number of workers coming under the Industrial Disputes Act, 1947, who formerly did not have this benefit. Likewise, the available surplus for bonus payment has already been enlarged by the recent amendment to the Payment of Bonus Act, 1965. Certain calculations made at the official level indicate that the additional amount disbursed as bonus on account of the implementation of the Payment of Bonus Act would be

1. Supreme Court (1966) II LLJ p. 546.

about Rs 16 crore and the tax loss about Rs 8 crore annually. We are of the view that the debate on this issue need not be reopened.

17.33 It has been argued before us that many employees - particularly those in the small establishments which employ less than 20 persons - who were getting bonus before the Payment of Bonus Act, 1965 have now been deprived of

that privilege. We feel that no employer should take advantage of the Payment of Bonus Act, 1965, to avoid paying bonus to workers merely because the Act is not applicable to his unit. Such establishments should continue paying bonus on the principles on which the Act has been framed. Government should consider the feasibility of making a suitable amendment to the Act in respect of such establishments.

## BOOK REVIEWS

Chopra, Ajai et al., *India: Economic Reform and Growth*, Occasional Paper 134, International Monetary Fund, Washington, December 1995, Pp. ix+74, Price US\$ 15.00.

This is a report by an International Monetary Fund (IMF) staff team on the progress made by India since the macroeconomic and structural reform process began in 1991. The general assessment is that overall this has led to robust economic expansion, recovery of investment and rapid export growth. The rate of inflation has come down and the country's external position is much stronger. *But*, if India is to emulate the East Asian countries with regard to growth and reduction in poverty, many more changes will have to be made in policies and reforms. The detailed assessment is summarised below:

The adjustment programme was undertaken in the wake of the severe balance of payments crisis of 1990-91. The fundamentals of the economy had weakened considerably during the eighties and the current account of the balance of payments was greatly in deficit. The gap was covered by rapidly growing debt, both internal and external, and as this debt was on commercial terms debt service increased substantially. A sharp increase in petroleum prices in 1990 led to an increase in the import bill, a reduction in the inflow of workers' remittances, a diminished access to commercial borrowing because India's credit rating had gone down, and an increase in the outflow of non-resident Indians' deposits had brought about a balance of payments crisis. India was almost on the brink of defaulting on her debt service payments because her foreign exchange reserves were very low.

The situation was brought under control by severe import compression and emergency assistance by the IMF. However, an adjustment programme was considered necessary for long term improvement. Hence in 1991 an adjustment strategy was adopted; it consisted of (a) a 19 per cent devaluation and an increase in interest rates to reverse capital outflow, (b) fiscal consolidation which would bring down the deficit in the Central budget from 8.5 per cent of GDP in 1990-91 to 5 per cent of GDP in 1992-93, (c) mobilisation of exceptional financing from international aid

agencies and donor countries, and (d) major structural reforms including industrial deregulation, trade liberalisation, tax reform, tariff reduction and financial sector reform.

The result of these measures was a modest growth in output in 1991-92 followed by high growth in the next two years. In 1994-95 it was as high as 6.5 per cent. While agriculture and services contributed steadily to growth the performance of industry has been erratic - relatively poor in 1991-92, 1992-93 and 1993-94 and above average in 1994-95. This was due to import compression, tight industrial credit and weak export demand in the earlier years; with their elimination in subsequent years, performance improved steadily.

Employment which increased by about 5 million annually in the eighties fell to 3 million in 1991-92. Since then the rate of job creation has gone up to 6.3 million between 1992-93 and 1994-95. Most of it seems to have occurred in the informal sector. The proportion of people below the poverty line, however, seems to have increased in both rural and urban areas.

The stabilisation of the Indian economy was achieved to a large extent because of the fiscal adjustment made by the Centre. The consolidated deficit of the Centre, States and Union Territories, which rose through the eighties, was 10.5 per cent of GDP in 1990-91. This deficit fell to 8.5 per cent of GDP in the first two years of reform, went up to 11 per cent in the third year and fell again to 10.5 per cent of GDP in 1994-95. This was because of a decline of 2.5 percentage points in the Central deficit, brought about by an increase in non-tax revenue and reduced capital spending. While the reduction in deficit in the first two years improved the credibility of reform, the cutback in public sector investment of 1 per cent of GDP in the first two years led to a slow-down of growth due to an adverse multiplier effect. The relaxation of fiscal policy in 1993-94 led to high growth but also to a large fiscal deficit and larger government debt.



The large and growing deficit in the eighties was due, in the case of the Centre, to an inelastic tax system, rising burden of interest payments and other current expenditures. State governments also incurred large deficits because of stagnating revenues and rising current expenditure. Public enterprises were a drain on both. A reform of the tax system and expenditure was considered vital to correct these trends.

The pre-reform tax system suffered from the following deficiencies: (i) excise duties, the main source of revenue, were levied on a narrow base and excluded agriculture, small-scale industries and commerce; (ii) customs duties were high and differentiated; (iii) personal income tax was levied only on 8 per cent of GDP in 1990-91; (iv) both individual and corporate tax rates were high even after they had been brought down; (v) state sales taxes varied widely in coverage, point of collection and rate; and (vi) non-compliance was high because of a weak administration.

The Central Government has undertaken tax reform which has led to a general lowering of tax rates and an improvement in the structure of indirect taxes. This has led to a significant shift in the structure of tax revenue from trade taxes to income taxes. In spite of all this reform, the tax-GDP ratio was lower than that in 1990-91. Hence the need to widen the tax base is most urgent; also state sales taxes need to be replaced by a value added tax (VAT) which will make more effective taxation of wholesale and retail margins possible.

Expenditure reform has, however, lagged behind tax reform. A major proportion of expenditure still continues to be unproductive and, therefore, resources had to be drawn from capital programmes including infrastructure and loans to states, to fund this expenditure. A thorough reappraisal of the structure of expenditure and a more effective expenditure control mechanism are necessary. Greater emphasis is needed on maintenance spending, reducing excess labour, re-ordering expenditure priorities,

improved programme design, management and implementation, curbing leakages and administrative overheads, and better cost recovery.

Most of the fiscal adjustment has been undertaken by the Centre and not by the States. The States have not been able to do much with regard to four major problems: (i) a weak revenue effort; (ii) a growing wage bill; (iii) uneconomic enterprises (particularly electricity and transport); and (iv) low cost recovery of public services. Since an inefficient State revenue and expenditure system can neutralise the benefits of Central fiscal reform, it is necessary to have a system which will ensure for the States adequate sharing and transfer of Central resources and greater control on discretionary spending by them.

If the fiscal deficit is not reduced to a reasonable level, (a) the burden of stabilisation will fall on monetary policy, (b) the burden of debt service may be unsustainable, and (c) national saving and, therefore, investment will be lowered. Therefore the revenue-GDP ratio has to be raised through a broadening of the tax base and public enterprise reform.

India's trade policy has been considerably liberalised since 1991 with sharp cuts in tariffs, easing of quantitative restrictions and free imports of intermediates and capital goods. Restrictions on exports have been relaxed and export incentive schemes have been revamped to reduce distortions. This has led to a considerable reduction in the anti-export bias of trade policy imparted by the earlier emphasis on self-reliance.

This liberalisation has resulted in the trade-GDP ratio rising from an average of 12.7 per cent in the eighties to nearly 19 per cent in 1994-95. Nevertheless, as the level of protection in India is still higher than that in East Asian and many developing countries further reduction in tariffs and quantitative restrictions is necessary. Also imports of consumer goods should be allowed and restrictions on trade in agricultural commodities should be removed.

There has been a remarkable surge of foreign investment in these years. During 1993-94 and 1994-95 substantial foreign capital flowed into India in the form of a large number of international equity issues, share purchases on local stock exchanges and direct foreign investment. As a result total foreign direct and portfolio investment rose from \$148 million in 1991-92 to \$5.1 billion in 1993-94 and an estimated \$4.8 billion in 1994-95. This was the result of liberalisation of policy regarding the share of foreign equity holding in priority issues, granting permission to good Indian companies to raise funds in Euro-markets and, also, to registered foreign institutional investors (FIIs) to buy equity and debt securities on Indian stock exchanges. Much of the portfolio investment has, however, come from individual investors including non-resident Indians (NRIs) and returning 'havala' funds. Investment by institutional investors appears to have been limited. The net effect of this inflow seems to have contributed substantially to the strengthening of India's external position and added to the resources available for investment.

The inflow into India has been relatively modest as compared to that into other developing countries because of the control exercised by Government on the growth of debt and because of concerns about bureaucratic procedures, inflexible labour policies and a slow-moving legal system. Bulk of the funds raised abroad have gone into blue chip Indian companies in the private sector. Even this modest inflow will be sustained only if economic reform is pushed further and strong growth and capital market development in terms of greater transparency and efficiency of trading are fostered. Direct foreign investment will also increase if an appropriate framework for investment in infrastructure is developed.

Deregulation of the industrial sector has been part of the reform programme since 1991. Indian industry which developed under a highly regulated system which hindered competition had low efficiency. These protected industries - petroleum, coal, chemicals, steel and fertilisers - accounted for over half of fixed capital formation

but contributed only two-fifths of the value added. They were also three times as capital intensive and twice as power intensive as those with low protection.

Though reforms have spurred competition and investment in areas such as automobiles, consumer electronics, telecommunications, petrochemicals and power, quite a few problems remain such as: (i) private investment has not come in some areas, e.g., civil aviation, because of doubts about the ability to compete with public sector projects; (ii) the process of obtaining all the licences and clearances from State governments still continues to be cumbersome; and (iii) the continued policy of reserving production of about 850 items in the Small Sector and protecting them in various ways has inhibited innovation, efficiency and investment in those sectors which have a great export potential.

A major obstacle to development in the coming years will be the poor quality of infrastructure (power, roads, water and telecommunications). Although investment by Government in infrastructure has been substantial, poor financial management, operational inefficiency and inadequate maintenance have led to serious inadequacies. Although this sector has been thrown open to private investment as a way of speeding up infrastructure development, progress has been slow because satisfactory administrative and commercial arrangements have not been put in place and a more mature debt market which would take care of financing has not been established.

Another problem of industries is what has been called 'sick units' - loss-making units which are not allowed to close down. The Bureau of Industrial and Financial Reconstruction (BIFR) which was set up to restructure such units has been hardly effective because of its cumbersome procedures, inflexible labour laws which prevent retrenchment, and inability to liquidate land and other assets for restructuring without State approval. These need to be overhauled to ensure greater flexibility. However, this would require a 'safety net' to take care of retrenched workers.

The National Renewal Fund set up in 1991 for this purpose should be broadened if such restructuring is to succeed.

Public sector enterprise reform is also urgently needed because of the resources put into them and their uninspiring performance. In 1994, there were 1,000 enterprises of which about 800 were owned by the States. Their share in GDP was over 25 per cent in 1993-94, from a level of 8 per cent in 1960. They are highly capital intensive; in the manufacturing sector, at the end of the 1980s they accounted for 55 per cent of total investment and 15 per cent of output. Their financial performance has been poor. Net profits after taxes amounted to 3 per cent of capital employed which was not enough to cover depreciation.

Public enterprise reform at the Centre has aimed at greater efficiency, productivity and competitiveness. To this end, (a) entry barriers, subsidies, price distortion and preferential access to budget and bank resources have been eliminated; (b) increased autonomy has been given to the management and they are expected to be profit-making centres; (c) restructuring policies have been adopted and a social safety net programme has been set up; and (d) divestment has been undertaken. The reform in competition has been most extensive. Except in six areas, viz., defence products, atomic energy, coal lignite, mineral oils, railways and radioactive minerals, Public Sector Units (PSUs) in all other areas face competition. But reforms at the State level are lagging behind.

Similarly more operational autonomy has been given and a memorandum of understanding to objectively evaluate management has been set up. But neither greater autonomy nor better management seems to have been achieved, because of lack of exit policies for labour and managerial personnel. Divestment has also not been successful because the objective of raising revenue has often superseded the objective of improving efficiency. The process needs to be accelerated and broadened.

Liberalisation of agricultural policies has the potential for dynamic labour intensive growth, conducive to a more rapid spread of reform. This would involve elimination of restrictions on wholesale trade and storage, abolition of public procurement, ending licensing of agro-processing industries and diverting resources going into agricultural subsidies to development of rural infrastructure.

Financial sector reform, in the form of reduced interest rate distortion, non-preemption of bank funds by the State and regulation of bank credit to different sectors, is necessary to prevent overallocation of funds, accumulation of non-performing assets and costly yet poor quality financial services. A great deal of restriction has been removed but additional reforms are still needed. Government should rely less on the statutory liquidity ratio and more on financial controls to manage its finances. Long term money markets and a secondary market in Government securities need to be developed. This would lead to greater reliance on indirect instruments of monetary control. Banks also need to be strengthened through greater competition, cost cutting and reduction in non-performing assets. There should be complete deregulation of deposit rates and the share of the priority sector advance should be brought down to ten per cent.

This summary clearly reflects what has been referred to by antagonists to reform, as an unalloyed Fund-Bank analysis and prescription. The central theme is fiscal consolidation and a return to the market in many other areas, such as industry, banking, foreign exchange, etc. Much of the analysis is along the lines of many government publications. So far as prescriptions are concerned, they only mention what needs to be done but do not go into the question as to why reform is not proceeding as fast as it should.

The reforms which have been undertaken so far are the ones which could be easily implemented without encountering hostility from any of the innumerable pressure groups. The Central tax system has been reformed to great acclaim because it has reduced the burden of taxation in

general. Whether the new tax regime would raise enough resources depends upon the hoped for increase in compliance - which is doubtful, if past experience is any guide. As the study notes the States have done hardly anything in the matter.

Public enterprises which were set up to contribute resources for further development have, on the contrary, been a drain on the exchequers of the Centre and the States. Their reform has not made much headway because of an ideological hangover and opposition from pressure groups such as trade unions, farmers and others who benefit from the present dispensation, and politicians who use them as a source of patronage. Divestment has also not made much progress because of the fear of a negative fall-out. Divestment may not also be possible, except at throwaway prices because many projects have been poorly executed and maintained.

A point that needs to be emphasised but has not been emphasised is that privatisation, particularly in the infrastructure area, may lead to greater efficiency and better use of resources but may also be exploitative of the consumers because they are natural monopolies. Proper and effective regulatory agencies are necessary for this purpose. While the study emphasises the need for an appropriate administrative framework to attract resources for infrastructure development it does not touch upon this vital aspect.

The study rightly emphasises that not much has been done to reduce expenditure as part of fiscal consolidation. This is entirely because of the political implications of such an effort. The opposition to the Fifth Pay Commission's recommendation, that the numbers of the bloated bureaucracy should be phased down, substantially indicates difficulties in the way of needed changes. Similarly, it would not be easy to reduce unnecessary subsidies, have proper cost recovery and cut costs in public enterprises because of the likely negative political impact. A coalition government of many parties with different agendas will find it extremely difficult to undertake such an exercise. The dithering by the Central Government on the much needed increase

in petroleum prices is an example in point. Some State Governments dominated by regional parties have gone in the opposite direction and actively added to unproductive expenditure because short term vote-gathering policies are looked upon as more important than policies generating long term prosperity.

Since the thrust of the study is on growth through removal of the distortions in the economy by approximating to the market in various sectors, there is little by way of comment on the basic problems of the Indian economy, viz., poverty, unemployment, poor health facilities, illiteracy and growing numbers. Rapid growth apparently is the answer to all these problems. While continued growth at 7 to 8 per cent per annum for a fairly long period is absolutely necessary if a decent minimum living standard is to be provided to the Indian people in a reasonable period of time, distributional and equity problems which arise in a growing economy cannot be ignored. A bland statement regarding a larger safety net or elimination of poverty is not enough. India is a democracy with the bulk of the people poor and serious economic dissatisfaction on the part of the poor can endanger political stability, so necessary for development. Therefore, even while rightly aiming at higher rates of growth we cannot afford to wait for a trickle down but have to have a more direct and effective intervention in the areas mentioned above. Only then will it be possible to push the implementation of the desirable reforms agenda at the required pace.

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Yugandhar B.N. (Ed.), *Land Reforms in India: Andhra Pradesh - Volume 3, People's Pressure and Administrative Innovations*, Sage Publications, New Delhi, 1996, Pp. 393, Price: Rs 495/-.

During the last decade not many agricultural economists have preferred to venture into the questions relating to land reforms in India due to both, other pressing research issues and the

amount of studies on the subject done during the second phase of the reforms. The process of liberalisation in the Indian economy raised the demand for releasing the regulatory mechanism in agricultural sector, in general, and the ceiling on agricultural holdings, purchase of land and tenancy, in specific. This has caused a revival of the debate on land reforms in India. Questions like, why globalisation in the rest of the sectors should not be accompanied by lifting of regulatory mechanism in agricultural land holdings and treating agriculture as any other enterprise, whether the gentlemen farmers and industrial houses should be restricted, are being posed. Article 39 of the Constitution of India, under the Directive Principles of State Policy, expects the state to ensure that the ownership and control of the material resources of the community are so distributed as to subserve best the common goal and that this does not result in concentration of wealth. Given the current economic scenario on the one hand and the rural asset structure (its inequality) as well as the constitutional directive principle on the other, the debate stands at cross roads. The situation is confounded by the partial (or various degrees of) success(!) of the land reform measures across states.

Land reforms is strictly a state subject. The first authoritative outline of a national policy, in the form of guidelines to states, was formed during the First Five Year Plan. The first amendment of the Constitution was undertaken to regularise the Bihar Land Reforms Act of 1950. Following the central guidelines, other state governments passed bills with the required modifications. Given the heterogeneity of agrarian structures, modes of production, historical evolution of peasantry and land-related institutions, the differential impact of the land reform policy was not an unexpected occurrence. Apart from the levels of impact, it is also academically interesting to note the interaction of land related institutions with the legislative institutions. This becomes further intriguing when one analyses it from the angle of historical emergence of these. Therefore, analysis of land reforms in almost every state becomes an interesting case study. In addition to this, land reforms also represent the economic

basis of local politics. Wolf Ladejinsky commented that politicians, and only politicians, can make good or poor reforms. Land still represents the social and political status in rural India and when such political/social status is being transferred from one social group to another through government intervention, it ought to create aberrations or mixed impact. This confounds further when the government is elected through the very same power structure and the decision-making process is dominated by the very same people whose interests are tied with the reforms and, hence, the outcome of the land reform measures across the states gives an interesting mosaic of the interaction between polity, social status, economic base and the national priority.

A series of workshops were organised by the Land Reforms Unit of the Lal Bahadur Shastri National Academy of Administration, Mussoorie, for different states in the country. These workshops covered various aspects of land reforms, agrarian structure, tenancy, distribution of land, gender question and peasant movements. The present volume is a collection of papers on the experience of land reforms in Andhra Pradesh presented at one such workshop held at the National Institute of Rural Development, Hyderabad during 1992. This is, in fact, the third volume in the series of 14 volumes planned by the Lal Bahadur Shastri National Academy of Administration. The volume provides both state level macro analyses as well as micro level analyses of the key issues in the state.

Andhra Pradesh has a unique distinction in the history of land reforms due to the land struggles led by N.G. Ranga and the Telangana movement as well as the recent peasant movements in a few districts of the State. The volume covers a vast span, beginning with the historical perspective of the agrarian movements in Andhra Pradesh (AP) from an authoritative account of the changing agrarian structure in the state given by G. Partasarathy to the implementation process and micro-level studies of land reforms. The volume covers almost every aspect of land reforms and also incorporates some interesting allied aspects,

namely, the legal problems (S. Seshaiiah), re-emergence of tenancy (Krishna Rao), implementation of ceiling (Kolla Venkaiah) and dilemmas of the concealed tenancy.

For setting the background, the two initial chapters on agrarian movements and overview of land reforms discuss the genesis as well as the process of implementation of reforms. It is a known fact that the agrarian structure in India is characterised by inequalities, and that it has a marked association with the Hindu caste hierarchy. Thus, the economic inequality in the form of asset structure gets transformed into a self-sustaining social inequality.

The state of Andhra Pradesh was formed by combining Andhra, Telangana and Rayalseema regions. The state at the time of Independence had varied tenurial systems. Coastal Andhra region of Godavari delta had *Zamindari*, *Inamdari* and *Ryotwari* systems whereas Telangana had more oppressive *Jagirdari* and *Diwani* systems. Telangana, or what is known now as larger Andhra region, was under the rule of Nizam and, though the Malghuzari Land Revenue Act of 1907 recognised the tenants above 12 years of tenancy as permanent tenants and the land legislations were passed in 1939 and 1944, the tenant exploitation continued unabated in the Telangana region. Pallavas who ruled the coastal Andhra and Rayalseema region had initiated and perpetuated *Zamindari* system. However, the problems of usury were not as severe then as those in Telangana. During the 1930s, peasant agitation led by N.G. Ranga took place which caused peasant uprising thereby connecting the polity with land reforms. At about the same time the Communist Party of India also took up the issue to fight for *Zamindari* abolition. The early 1940s witnessed the famous Telangana uprising with Andhra Mahasabha taking a leading role in it. The armed struggle of peasants against oppressive forces, represented by land owners and by *Razakars* of Nizam, had its success in drawing attention to the severity of the problem. After the police action in the former princely state of Hyderabad, the military government that followed immediately abolished Nizam's *Sarf Khas* lands and *Jagirdari*

system. After the brief military rule, a civilian government took over and vowed to implement speedily land reforms. Political analysts feel strongly that this particular policy frame of the Congress party was more to counter the then popular Communist movement in Andhra Pradesh than to support the cause of equity. Even *Bhudan* movement of Acharya Vinoba Bhave was termed as a tool to dilute the peasant struggle. However, it is clear that the peasant struggle has led to state intervention in agrarian problems. In their candid analysis, Suri and Raghavulu highlight not only a linear relationship between the peasant uprising and reforms but also indicate a circular relationship, which continues even after the recent phase of reforms.

The agrarian structure of AP naturally comes as an issue of immediate concern. The chapter on this is contributed by G. Parthasarathy and incorporates the most important aspects of the changing agrarian structure and directions for land reforms. In fact, the chapter by C. Francis, describing land reforms, could have come after the changes in agrarian structure are analysed. However, the changes in agrarian structure occur not only in response to land reforms but also due to various other socio-economic factors. It is agreed that decomposing the influence on changes in the agrarian structure due to land reforms and other factors, respectively, is most difficult. Therefore, the analysis of changes in agrarian structure has to be viewed as a precursor to the impact analysis of land reforms. Parthasarathy's analysis takes note of all the macro level changes in the agrarian structure and, interestingly, the analysis is supported with some micro-level data also. Among the major changes observed in the agrarian structure, the author highlights the following: (i) the process of transformation of feudal holdings to capitalist holdings, (ii) sharp decline in operational holdings under large farmer category which is more due to the *benami* transactions, (iii) general disappearance of the inverse relationship between land size and productivity for which there is evidence, and (iv) the nexus between land power on the one hand and bureaucratic and police power on the other. Some parts of AP are

extremely disturbed regions and the peasants have taken up to armed struggle. A large number of such disturbances originated from the land problem. These problems could be tackled well before they assume alarming proportion. The chapter includes a brief outline of directions for future. There is some attempt at looking at the changes in agrarian structure in response to the land reform measures at the regional level but this does not bring out in full the inter-regional and intra-regional intricacies of the land problem in the post-reform situation.

A good overview of the land reforms in the state of Andhra Pradesh is presented by Francis in the second chapter. This gives a brief account of the pre-reform situation and incorporates the discussion about each of the measures. What is more interesting here is the sketch about the intended and unintended results of reforms, and some across the board sweeping suggestions. Some of the suggestions include: (i) 'Radical restructuring of all legislation concerning land reforms, plugging all the loopholes hampering implementation'. (ii) 'Ceiling should be limited to a maximum of 10-12a. (acres)'. (iii) 'The rural poor should be organised on class lines' (p. 68). And (iv) voluntary organisations working with the rural poor should be given a prominent role to play in the suggested set up for implementation of land reforms. These suggestions are better made than put into practice. I believe that it is not very prudent to think that voluntary organisations (I maintain distinction between people's movements and voluntary organisations) can do everything where others have failed.

Telangana agitations in the Andhra region between 1946-52 brought to fore the usury and oppression of tenants by the landed gentry. The struggle was directed more against the coercive policies of the then rulers of Hyderabad state. After a heavy cost of about 2,000 deaths and only after the police action, the agitation subsided in response to the military government's enactment of *Jagirdari Abolition Regulation*. The Andhra Pradesh Tenancy and Agricultural Act of 1950 and the AP Tenancy Act of 1956 were passed in succession. Both the Acts were directed mainly

towards protecting tenants, transforming rentier owners to cultivating owners, fixing of rent, exceptions to be made in favour of landlords, and setting up a mechanism for dispute settlement. Krishna Rao, Gopal Iyer and, to some extent, Narinder Bedi analyse the tenancy reform and its impact in the state in Chapters 9, 10 and 12. Among these three chapters Gopal Iyer's study is based both, on the analysis of the policy as well as the field work conducted by Indian Administrative Service (IAS) Officer Trainees in different districts over the years. Each trainee covered one village from a district. In this painstaking analysis the author has gone into all small details of the impact of tenancy reforms. But I am afraid the analysis, more or less, suggests no significant movement away from the position where the state began with tenancy reforms because at the end of the chapter the author lists the recommendations such as: (i) implementation of provision of fair rent, (ii) entering the tenants' names in the cultivators' column of the record of rights, (iii) provision for legal record of rights to oral tenants, and (iv) conferment of occupancy rights on informal tenants. This sounds more or less reiteration of the AP Tenancy and Agriculture Act 1950 and 1956 which enlist - (i) regulation of relationship with landlord, (ii) regulation of alienation of land, and (iii) fixation of rent and lease period, among other provisions. Gopal Iyer's chapter brings together a large number of issues highlighting the failure of the policy and suggesting legal and administrative measures. It is an irony of the situation that tenancy reforms abolished the tenants only from record and introduced insecure oral tenancy contracts. Krishna Rao also provides sufficient evidence to prove the re-emergence of the insecure tenancy in parts of Andhra Pradesh.

Andhra Pradesh Ceiling on Agricultural Holdings Act came into being as early as in 1961. With a ceiling limit ranging between 27 and 324 acres, it proved a complete failure due to various loopholes. Subsequently, the AP Land Ceiling Act of 1973 was passed but this was challenged on various counts. The Act became an item in the 9th Schedule of the Constitution through the 34th Amendment which gave the Act the required

constitutional validation. After careful drafting (during 1973) and vigorous implementation of the Act, a sizable amount of surplus land could be acquired. Gopal Iyer's chapter analysing the implementation of ceiling on land holdings and the chapters by K. Venkaiah as well as by A. Giridhar bring out the details of experience of the implementation of the ceiling Act. Andhra Pradesh seems to show mixed performance of the impact. On the one side we have 71 per cent surplus area acquired under the Act and 90 per cent of this was distributed, out of the total declarations filed only 0.02 per cent remain to be decided, and 98 per cent of the allottees are in possession of their lands. On the other hand, we have evidence of persistence of agrarian inequality, large number of *benami* transactions, back-dated manipulations in the *pahnis* and, as a result, a large number of cases declared non-surplus. Iyer's analysis brings out a number of legal and administrative recommendations for effective implementation of the Act. The administrative failure and the negative role of the courts are brought forth in the chapter by Kolla Venkaiah. From a micro-level analysis of Mahabubnagar district, Giridhar also came to the conclusion that judiciary is used more to prolong litigation and make intelligent use of conceivable loopholes. On the same issue, Seshaiiah poignantly observes that the *Zamindars* and landlords, who did not waste any time (after Independence) to become a part of the state apparatus and thus handled the crucial factor of equality through reforms, also used Articles 14, 19 and 31 to strangle the ceiling legislation. Judicial interpretations were also more in favour of the letter of the law than the larger issue or spirit at the stake.

The present volume thus covers a complete span of issues relating to land reforms in Andhra Pradesh. The distribution of surplus land to the landless and the gender angle of the reforms also feature in the volume but not so prominently. Probably, the canvass set forth for the analysis was too large and the analysts of heterogeneous disciplines caused inadvertent repetitions of some prominent issues. But some of the important aspects that could have been incorporated here

include the regional/across district changes in the agrarian structure, changing land use pattern and common property resources, socio-economic status of the allottees, types of tenancy and risk sharing, and capitalisation of the agricultural sector. I am fully aware that these issues would have shifted the balance of the book more in favour of agrarian structure than reforms, *per se*. The present form, therefore, is the most desired form. The book brings out very clearly the crucial aspects in bold relief through in-depth analysis. It can serve as a standard reference material as well as a teaching tool.

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Shenoi, P.V. (Ed.), *Contours of Social and Economic Development: Policy Issues*: ISEC Silver Jubilee Commemoration Volume 1972-97, Institute for Social and Economic Change, Bangalore and Concept Publishing Company, New Delhi, Pp. 292, Price Rs 350/-.

This is a collection of essays prepared to present a retrospective of research contributions over the last twenty-five years of The Institute for Social and Economic Change, Bangalore. During the period, the work of the Institute has expanded into several special units, to wit, Economics Unit, Education Unit, Sociology Unit, Agricultural Development and Rural Transformation unit, Population Research Centre, Quantitative Economics Unit, Ecology Economics Unit, etc. This shows the broad scope of the research work of the Institute. Most of the essays are written by the staff members of each of these units and they have done a competent job in reviewing and summarising the trends of the research work of their respective units. Taken together they present an overall view of the pace and patterns of changes taking place in the Indian economy, polity and society over the last quarter of the century. The findings are the usual ones commonly also found by other workers in their respective fields. The research, carried out by the various units of the



Institute, is well related to the central theme of this volume. It is on the whole a creditable performance and is a promise of the performance to come in the future. Here is wishing all the best for the Institute.

N.V. Sovani

Kurtzman, Joel, *The Death of Money - How the Electronic Economy Has Destabilized the World's Markets and Created Financial Chaos*, Simon & Schuster, New York, 1993, Pp. 256, Price \$ 22/ Rs 375/-.

'Money is dead', according to Kurtzman. It died two decades ago as a store of value and unit of account. It is no longer a discrete object. It has been transmogrified. It is no longer a *thing* but a *system*, a network of computers which includes all the world's markets - stock, bond, futures, currency, interest rate, options, etc. The new network is much more volatile than the old world money network.

The death of money has splintered the world into two economies: the 'real' economy where products are made, trade is conducted, etc. The 'financial' economy is twenty to fifty times larger than the 'real' economy and it is not an economy of trade but of speculation. It deals in financial instruments and is largely an unregulated market, which deals in, what are called, 'derivative products' simply by sending electronic pulses down a line. A derivative is not a product, the way a stock is a unit of ownership in a company, but is more akin to an abstract notion. The possibilities for developing new 'derivative products' are endless. The world in which the new economy functions is more akin to an electronic 'commons', than it is to an economy and it is owned not by governments but by the people who use it. Countries have become increasingly irrelevant, economically speaking, and nation-states have lost their economic clout. All markets are now one, they are all linked, and we are on the megabyte standard. This has made life different for professional money managers. They are more akin to mathematicians than stock pickers or

dollar-traders. It is a system which dumps information on the desks of world's money managers in quantities too vast to assimilate. As a result traders are playing catch-up. A system that is so responsive to world's moods is also afflicted by jitters. The megabyte standard has to a large degree institutionalised rather than smoothed volatility. It has been built to take advantage of minuscule changes in prices of any thing that can be charted, bundled and traded. It has been created to make profits from shifts that in the past would have simply been ignored.

The high-tech financial economy with its boom and bust cyclicity and its daily volatility has taken nearly complete charge of the real economy. Reuters started the net work of financial news a hundred years ago. Others followed. While relatively cheap technology has made information accessible, the cost of obtaining that information is usually quite steep. For all these reasons individuals have largely left the markets as direct participants. The only way they can compete with wealthy firms that invest hundreds of million dollars annually in technology, software and information is by joining funds such as mutual funds. As a result most markets are dominated by professionals. In these markets time frames are shorter, decision-making is concentrated and the investment process is much more automated than ever before. It generates a trend that favours quick trading over long term investment.

The whole game started on August 15, 1971 when Nixon closed the 'gold window', delinking the value of the dollar to gold. This created enormous arbitrage possibilities decoupling the 'money' economy from the 'real' economy. The dollar became a currency without any underlying value whatever and without any limitation on governments' (or private sectors') ability to create it. 'The dollar has become a circular argument. .... It is still a promise to pay. But to pay what to whom?' (p. 61). Though the government plays a far larger role in the economy than ever before, it has very meagre resources with which to manage the economy's ups and downs.

Money creating has gone international and has gone outside the control of individual governments. Without a gold or commodity link, money is not a form of equity. It is not even a real asset but an abstraction. It arises as a consequence of debt. Back in 1971, Euro-dollars, representing America's payments abroad amounted to \$800 billion. Until 1987, a bank dealing in Euro-dollars could lend 100 per cent of the dollars it had on deposit. And so they grew fast and in that year amounted to \$1.5 trillion dollars and more. What determines their value? Confidence and interest rates. Interest rates determine the value of the dollar, instead of the other way around. Nixon's action moved the world to a new standard, the interest rate standard. All investors have one single goal: to earn more than the cost of money.

On October 19, 1987 the international stock market crashed and the Dow Jones Industrial Average plunged 508 points. It fell 22.6 per cent, twice as far as the crash of October 1929. But relatively few people were hurt. With \$1 trillion lost only 50 thousand financial specialists lost their jobs, a hardly significant fact in an economy that employs more than 118 million people. It was a cyber space event. The machines of the information age are not contemplating investment. They are looking at quick fixes and high rates of return. This electronic industry is adding to instability not just in the economic sphere but in the social field as well.

In countries everywhere two trends compete: integration into global grid on the one hand, and greater local identification, on the other. Could it be the time to say 'Good-bye to the nation-state?',

as the *Economist* asked. There is an increase in ethnic identification accompanying globalization. For many people globalization is accompanied by a feeling of powerlessness. In a global economy the threats to the local economic welfare and well-being are vague, foreign and come from far away. How do you retaliate against competitors from across the globe? The electronic economy will only intensify the trend towards localism, particularism, provincialism, nationalism and racism among people whose lives and identities are disrupted by the end of the nation state.

There is no disputing the facts and the happenings that Kurtzman records. The only remedy he proposes is to return to old gold parity. That is hardly likely to be accepted as it sounds too jejune. Kurtzman is exaggerating when he pronounces the death of money. It will be inadvisable to ignore the evil portends he lights up and is a challenge to the economists to understand them and seek ways to master them. Money as a medium of exchange in the real economy remains very much alive and is likely to remain so for a long time to come. In the advanced countries, perhaps, traditional money is under some pressure of replacement. But in the underdeveloped countries all over the world such pressure is small, if not negligible. The death of money as reported by Kurtzman is highly exaggerated. All we can say to it is 'Money is dead. Long live money'.

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## BOOKS RECEIVED

Currently, a large number of books are being published on Indian economic political and social problems and developments. We give below a list of books we have received with a request for a review. For want of editorial resources, it is not possible to review all of them though many deserve a critical review. Interested readers are requested to write to the editor indicating which of the following books he would like to review or write a full review article on. We shall be glad to do the needful. Readers are also welcome to review books recently published, but not appearing in the following list. As the contributors to this Journal are aware, all contributions published here are adequately remunerated.

Bhambhri, C.P., *The Indian State : Fifty Years*, Shipra Publications, Delhi, 1997.

This book attempts to analyse the contemporary Indian state on the basis of its class-essence and its handling of the cultural issues raised by the forces of religious communalism in the light of Marx's concept of the *class-state*, the end of the era of nation-state with the emergence of transnational corporations and globalisation of the capital and also the Weberian concept of the *rationality* of the state. The analysis shows that as a *class-state*, the Indian state lacks the strength of cohesive leading classes because of the absence of unity among classes which are divided into various strata and fractions. It also shows how, like all other democratic-capitalist states, the Indian state struggles to extend its areas of acceptability and legitimacy and has, yet, evolved apparatuses of coercion, and how it uses simultaneously both the instruments - that of consent and coercion. Theoretical perspectives of the two schools - the Anglo-American political science and Marxism - on social and political change are presented. Such aspects of change as its content and meaning, its nature -, whether it is quantifiable or qualitative, instrumentalities of change, methods and strategies of bringing about change - gradual or with struggle and violence -, and, finally, opponents of change, are discussed, with the concrete experience of India providing illustrations to prove or disprove the perspectives of the two schools. Further, the author explores the possibility of (i) rejecting the *Hindutva* project of nationalism, also certain aspects of our historical inheritance and yet emerging as a strong nation-state, to fight the powerful forces of imperialism externally and anti-democratic forces internally; and (ii) of resolving the crises and contradictions

of modern capitalist development and earning legitimacy for both, the Indian state and the capitalist classes. Finally, issues pertaining to cohesion within the Indian state, its level of legitimacy and ideological hegemony, and the level of integration among its institutions, are addressed in the last chapter.

Carr, Marilyn, Martha Chen and Renana Jhabvala (Eds.), *Speaking Out: Women's Economic Empowerment in South Asia*, Vistaar Publications, New Delhi, 1997.

The book documents the experiences of seven NGOs in India, Pakistan, Bangladesh and Sri Lanka. These organisations have been working with poor women, both rural and urban, so that they could have increased access to and control over economic resources. The book (i) probes into the sources and causes of women's overall disempowerment, particularly, the contribution of economic and political disempowerment to their disempowerment overall; (ii) explores how far economic empowerment has helped to bring about far-reaching socio-cultural and political changes at all the levels - individual, family, community and the market place -, i.e., tries to understand the linkages between economic and overall empowerment of women; (iii) analyses the organising principles and practices, that have achieved the best results, and also examines the major constraints to organising, also to organisational growth, autonomy and sustainability; (iv) discusses what strategies, such as legal interventions, policy reforms, delivery of credit, training, technology and other services, etc., have proved most successful under differing circumstances; and (v) provides some qualitative rather

than quantitative insights into the process of change - direct tangible results, indirect tangible results and less tangible outcomes.

Maharashtra Economic Development Council (MEDC), Bombay, *Industrial Resurgence in India: Post-Liberalisation Scenario*, Special Number for MEDC *Monthly Economic Digest*, January 1997.

This MEDC publication gives a comprehensive account of the trends, magnitude and composition of industrial growth after the liberalisation policies have been initiated. It analyses the industrial sector, especially from the growth perspective standpoint. Further, comparisons are made between the growth performance of industries in two equivalent periods, pre-reform period, 1986-91 and post-reform period, 1991-96. It is divided into six chapters, each in turn supported by key data/statistics and appendices, wherever necessary. The publication also throws light on the industrial and other policy changes, the patterns of financing industrial growth, etc. The major sources of industrial growth - electrical machinery and chemicals accounting for about 60 percent of the growth of the manufacturing sector - and the track record of certain key sectors including power generation and mining are highlighted. Maharashtra having continued to lead the country in industrial sector of the economy, industrial developments in that state are compared with those in India. The current distinct downturn after the initial rapid growth, and the factors contributing to it, including the political instability in the country, are discussed in the last chapter which also explores the future growth prospects for industries.

Maheshwari, S.R., *The Census Administration under the Raj and After*, Concept Publishing Company, New Delhi, 1996.

The history of Census, one of the oldest and the single largest administrative activity in India, is the subject of this book. Kautilya's *Arthashastra* written around 321-296 B.C. laid stress on Census taking - an official enumeration of population - as a measure of state policy for the purpose of

taxation. Census, now undertaken every ten years, yields fairly reliable information on various facts of people's life and, thus, is a valuable tool for socio-economic policy-making and planning. Unfortunately, it does not attract the attention of the public administrationists to the extent desirable. Census exercise began in 1881 in the colonial India and has been carried out with efficiency since then, even during the Second World War in 1941 when the head counting was discontinued in Great Britain. Yet, the Census in India rested on temporary legislative enactments prior to Independence. It was only in 1948 that the Census Act, 1948 was passed and it provided a permanent statutory basis for this exercise. The first Home Minister of India, Sardar Vallabhbhai Patel, realising the significance of accuracy of information forming the basis for decision-making, even for the partition of the country or constitutional changes, piloted the Bill to that effect. It was generally modelled on the previous legislation, except that it deleted caste-wise enumeration and enhanced the penalty or fine for committing and/or abetting a Census offence, in order to check the interplay of sectional or communal rivalries. Also, under the Act, all Census functionaries are conferred the status of 'public servants' and are thus bound by the Indian Penal Code. Developments under this statute are examined in brief in the last chapter.

Quibria, M.G. (Ed.), *Rural Poverty in Developing Asia*, Vol. 2, Indonesia, Republic of Korea, Philippines and Thailand, Asian Development Bank, Manila, 1996.

This volume, a sequel to two earlier ones on Asian rural poverty edited by the same commentator, provides in-depth accounts of rural poverty in four developing countries. The three volumes are the outcome of the research project, *Priority Issues and Policy Measures to Alleviate Rural Poverty*, jointly sponsored by the Asian Development Bank and Norway. The project is divided into two components, the first addressing to important issues pertaining to rural poverty and the other comprising seven country studies. These country studies are divided into two volumes, the first featuring Bangladesh, India and Sri Lanka

while this second volume covers country studies of Indonesia, Republic of Korea, Philippines and Thailand. They are preceded by an Introduction synthesising them and providing a short overview of rural poverty in developing Asia. Income distribution, poverty norms, access to land resources, employment and human resource development are some of the aspects included in the country studies.

Racine, Jean-Luc (Ed.), *Peasant Moorings : Village Ties and Mobility Rationales in South India*, French Institute, Pondicherry and Sage Publications, New Delhi, 1997.

The volume analyses the migratory movements of rural population in India, particularly, retention and seasonal migration. The ever increasing urban population has not prevented the growth of rural population in India, at least in absolute terms, nor depopulated the countryside. The volume seeks to understand the rationale for the rural people's deep attachment to their roots, their oscillating movements between the village and the city, and the complex push-pull considerations which encourage or inhibit the decision to migrate. Field surveys were undertaken in Karnataka to analyse the socio-cultural and economic realities there which in turn influence the decision to migrate or to stay. Issues such as human moorings, urban growth and rural development are discussed in Part I. Part II presents survey findings pertaining to various aspects of village society and economy. Part III focuses on the analysis of the survey results, on the rationales and strategies that come into play in those numerous environments, and the significant role of social structures, values and traditions, rather than of economic motive, in the exercise of various options. Whether Karnataka is representative of India is discussed in brief. Also, comparisons are made with African countries, Brazil and China, with India as a point of reference.

Shah, A.M., B.S. Baviskar and E.A. Ramaswamy (Eds), *Social Structure and Change*, Vol. 1, *Theory and Method: An Evaluation of the Work of M.N. Srinivas*; Vol. 2, *Women in Indian Society*; Vol. 3, *Complex Organizations and Urban Communities*; Vol. 4, *Development and Ethnicity*; Sage Publications, New Delhi, 1997.

This is a five volume series brought out as a festschrift for M.N. Srinivas. A wide spectrum of structures and institutions as well as theoretical and methodological issues pertaining mostly to India are dealt with in the contributions of these volumes. They focus on themes in sociology and social anthropology which Srinivas has either himself worked on or encouraged others to work on. One contributor from each volume has written an introduction to it. The fifth volume is yet to be received.

The first volume, *Theory and Method: An Evaluation of the Work of M.N. Srinivas*, comprises as stated above an introduction, eight papers and a biographical essay on Srinivas. It concludes with a bibliography of his publications. The papers not only critically evaluate Srinivas' major writings but also explore the theoretical, methodological and professional issues arising out of them. In addition, a few contributions discuss themes, such as professionalization of the social sciences and ethical issues in social research.

Volume 2, *Women in Indian Society*, delineates on the changing status of women in India. Four papers in this volume deal with women's employment - two of them discussing it within the framework of development, one of them focussing on female cultivators and the fourth on the familial role of educated employed women. Women's education is the focus of the next paper while modern medicine and medical education vis-a-vis women is that of the sixth paper. The last paper examines female infanticide in the nineteenth century and its relevance today. The introduction to the volume, additionally, summarises Srinivas' writings on Indian women's position.

The ten contributions in the third volume, *Complex Organizations and Urban Communities*, analyse the management of complex organizations, with emphasis on the role played by traditional Indian institutions, especially caste in them. In addition, social aspects of urban communities and the processes of industrialization and urbanisation including the emergence of semi-urban pockets in India are examined.

Volume 4, *Development and Ethnicity*, is a collection of ten papers; the first five are concerned with various issues of development, the sixth one with social movements, the seventh with backward classes and the last three with issues of ethnicity. Although the volume is sub-titled *Development and Ethnicity*, none of the papers discusses the relationship between development and ethnicity.

Sharma, Pradeep K., *Foodgrain Economy of India: Government Intervention in Rice and Wheat Markets*, Shipra Publications, Delhi, 1997.

Tracing in brief the genesis of state intervention in India's foodgrains markets since 1942, the volume summarises the development and the main features of the Indian foodgrains policy. The study examines the functioning of the dual rice and wheat markets, how their controlled and uncontrolled segments are linked and what impact they experience as a result of a change in policy parameters - quantity intervention involving procurement, storage and distribution, or price intervention through fixation of support/procurement and issue prices. One chapter each is devoted to (i) agricultural prices, their determinants and price policy, (ii) structure and growth in rice and wheat economies, and (iii) government operations in foodgrains market. In the fifth chapter, by means of a simple simulation model solved over a sample from 1969-70 to 1988-89,

the study finds out that of the two options for raising foodgrains output, namely, investment in irrigation and fertiliser subsidy, the former is more cost-efficient one, in the context of economic liberalisation which creates favourable investment climate in agriculture.

Subha, K., *Karnataka Panchayat Elections 1995: Process, Issues and Membership Profile*, Institute of Social Sciences and Concept Publishing Company, New Delhi, 1997.

This study, based on extensive field investigations in all the districts of Karnataka, analyses critically the important issues that influenced the voting pattern in the 1993 and 1995 Gram, Taluk and Zilla panchayat elections held there. The election process and the socio-economic background also the political profiles of the members of the panchayat institutions as well as such aspects of local self-governance, as the level of participation in the panchayats and the new leadership emerging in them since 1987, are studied.

Vohra, Ranbir, *The Making of India: A Historical Survey*, M.E. Sharpe, New York, 1997.

Based on the socioreligious tradition of India, this volume provides a long, variegated history of India, even the pre-history of the Indian civilisation, and its current struggle for modernity. It is divided into three parts, pre-modern India up to 1857, India under the British rule from 1858 to 1947, and independent India from 1947 when her struggle for national identity began. It investigates the central question of how the past culminates in the present. This volume is expected to convey to readers abroad, especially Americans, who have a limited understanding of Indian affairs, the complexity of India's civilisation and to present an integrated view of her political, cultural and economic development.

World Bank, *India: Five Years of Stabilization and Reform and the Challenges Ahead*, A World Bank Country Study, The World Bank, Washington, D.C., 1996.

This Country Economic Memorandum, divided into two parts, takes the *Economic Survey 1995-96*, its July 1996 update and the *Common Minimum Programme* of June 1996 as its point of departure and assesses the economic reform programme of India, with some comparison here and there with Latin-American and some other former non-democratic countries. The first part sums up the achievements and shortcomings of five years of stabilisation and reform while the second outlines the challenges ahead. Macroeconomic developments, such as unexpectedly strong economic recovery accompanied with productivity improvements, corporate restructuring, increase in export and import intensity in most sectors, declining inflation, etc., since the

reform programme was launched in 1991, are analysed along with macroeconomic vulnerabilities and structural weaknesses, such as fiscal imbalances and poor rate of public savings, numerous restrictions on agriculture, lower social indicators and less development of human resources, infrastructure bottlenecks, a serious crisis in cities and towns, etc. The future challenges elucidated include fiscal adjustment, like expenditure and tax reforms and restructuring of centre-state fiscal relations, financial sector reforms and capital market development, reform in urban policies and institutions, also in agricultural policies, etc.

In addition to these two parts, there are three annexes, one of them comprising six executive summaries of the surveys undertaken for assessing the impact on the weaker sections of the reform programme, and also a statistical appendix.

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All text, including block quotations, footnotes, and table headings, should be double-spaced and typed on one side. Use medium-weight, opaque, bond paper. All pages should be of the same size, preferably 8-1/2" x 11", and unbound. Leave a minimum left-hand margin of one and a half inches, and a minimum right-hand margin of one inch. Number all pages, including footnotes and/or references, consecutively.

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If a paper is divided into major sections, the introductory section needs no heading. Subsequent sections should be given titles typed in capital letters and placed at the centre of the page. Do not use roman numerals. If there are sub-sections, the sub-titles should be underlined and placed justified with the left margin.

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All quotations should be checked carefully for accuracy, and should be unaltered except for

ellipses and bracketed insertions. Block quotations should be double-spaced and set off from the text by indentation.

### FOOTNOTES AND REFERENCES

All footnotes and references should be at the end, first footnotes, then references. In the text, footnotes should be numbered consecutively by superscripts following the punctuation. Reference citations in the text should be enclosed in square brackets, as follows: [Author, 1965, p. 9]. References listed at the end should be arranged alphabetically by author and should include the following information: for articles - author, year of publication, title, name of journal (underlined), volume and issue number; and for books - author, year of publication, title (underlined), publisher and place of publication, in the following format. We convert underlining into italics.

Maital, S., 1973; 'Public Goods and Income Distribution', *Econometrica*, Vol. XLI, May, 1973.

Chakravarty, S. 1987; *Development Planning: The Indian Experience*, Clarendon Press, Oxford.

If a Reference is cited in a Note, the Note may use the shortened reference form:

4. For a critique of recent industrial policy proposals, see Marshall [Marshall, 1983, Pp. 281-98].

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All tables, graphs, figures, and illustrations should be numbered and amply spaced on separate sheets of paper indicating in a marginal note in the text where such material is to be incorporated. Mathematical equations should be typed on separate lines and numbered consecutively at left margin, using Arabic numerals in parentheses. Use Greek letters only when essential. The word *per cent*, not the symbol %, should be used in the text and the tables.

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