

**Alternative Development Perspective:
Concept and Strategy:
Learning from Enviro-Development Debate**



'Resources and Livelihoods Group' of Prayas

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Concept and Strategy of Alternative Development Perspective: Learning from Analysis of Enviro-Development Debate

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Section 1: Introduction

History of the Development Debate

The development path followed by the so-called developing as well as developed countries is based on the combination of two principles—viz., macro-economic growth and 'trickle-down' theory. Although serious challenges were posed before this mainstream development model at the ideological and theoretical level, the conventional model continues to guide the development theory and practice of the international and national mainstream.

As the theoretical shortcomings and practical failures of the conventional development theory and practice started becoming evident, there have been many attempts in the last five decades to critique its theoretical as well as practical aspects. In response, the mainstream agencies have also tried to revise the model time and again, without changing its core. This gave rise to a long history of the debate on the issues of development in what are called Southern, third world, underdeveloped, or developing countries.

The development debate began with the end of the World War II. In this period, the classical school, based on the capitalist market economy model, dominated the mainstream development thinking and practice. The classical model was politically liberal and socio-culturally modernist in character. The concept of economic development as the primary objective of the development practice dominated the early phase. The assumption was that increased economic growth and higher productivity would bring economic prosperity, which would automatically trickle down to all sections of society and would eventually lead to social progress.

The alternative in the form of soviet socialist model of economy had emerged well before. Although there were no fundamental differences between the capitalist and soviet socialist model over the substantive content of development, the socialist model prescribed different development process with an emphasis on the role of the state. Consequently, the economic and political mainstreams of many newly independent countries adopted different mixtures of these two models, which were known by an umbrella term, viz., mixed economy model. Although there were many variations within this model, it was primarily based on the principles of state planning and that of the simultaneous existence of public and private sectors. The pursuit of macro-level economic growth through industrialization remained the primary objective of these countries.

In 1960s & 1970s, the critique of the mainstream development model started evolving mainly around the issue of equity. The apparent failure of the mainstream development model in ensuring a decent standard of living for large populations proved vacuity of the trickle down theory. The concentration of wealth in the hands of a small section and the concomitant pauperization of majority of masses resulted in widespread dissatisfaction and disappointment about the growth-oriented development model.

In the late 70s, the environmental or ecological perspective started gathering strength in the West (or the North). Gradually, it brought forward the question of hidden environmental costs of the modern development project. It developed a thorough critique of

the mainstream development model challenging its epistemological premises, which view nature merely as a resource to be utilized for the benefit of humanity. Different streams of radical environmentalism analyzed various dimensions of current development project and put forward alternative formulations to rectify the ill-effects of the industrial society.

Another important critique of the mainstream development model evolved in the late 70s in the form of feminist thinking. The feminist perspective revealed the patriarchal character of modern development and the 'enlightenment agenda'. The feminists challenged the western world-view dominated by the modern-western science and technology and described the anti-women character of modern development.

In the 1980s, political pressures in the North around global and local environmental issues propelled environmental concerns to the center-stage of the development debate in mainstream institutions and in academia. These pressures were rooted in failures of (which by now had become) the conventional theory and practice to reduce poverty and arrest ecological degradation culminating in social and environmental crisis in the South. In their efforts to resolve the environment and development crises, the mainstream institutions and academia arrived at the conclusion that there is an urgent need to change the prevailing environment and development policies in view of the severe crises. This realization led to the process of formulation of the World Commission on Environment and Development (WCED) or the Brundtland Commission, which culminated in the Rio Conference in 1992. The process resulted in center-staging the term 'sustainable development' in the international development discourse. However, by early 1990s, the term sustainable development had lost its appeal and had started gathering stigma as another empty cliché, used and appropriated by vested interests.

In the late 1980's and 1990's, while sustainable development was being show-cased widely, the following two major processes had begun: (a) the onslaught of 'Liberalization Privatization Globalization' or LPG policies and (b) emergence of the Sustainable Livelihoods discourse.

With the withering away of the counter-balancing geo-political force in the form of the Soviet block countries, the onslaught of the capitalist (or the mainstream) development thinking and practice was reinvigorated in the form of rhetoric and policy-frameworks around the themes of 'Liberalization, Privatization, and Globalization' or LPG. The new LPG rhetoric was professed vigorously, as if there had been no critique of the mainstream prescription until now. The lessons of the previous four decades of development experience were pushed under the carpet. The implementation of more comprehensive and more vigorous pursuit of macro-economic growth was started under this new policy through out the world. This policy is implemented in the South vigorously and ruthlessly by a new coalition of political and economic interests from the South and in the North. This has resulted in further economic and political marginalization of poorer sections in these societies.

While the discourse around the theme of sustainable development was being shaped, some development thinkers started proposing a complete reversal of development thinking and practice. Their revolt, in a way, was a revolt against the 'economistic', top-down and 'reductionist' development thinking and 'bureaucratized' development practice of the International and national development mainstream. The banner phrase of this discourse was

‘Sustainable Livelihoods Security’ or only ‘Sustainable Livelihoods’ (SL). The Sustainable Livelihoods or SL perspective proposed ‘security of livelihoods’ of the vulnerable sections of the society as the core objective of the development process. The discourse was oppositional as it proposed reversal of the direction of the discourse and learning—reversal of ‘top-down’ direction to the ‘bottoms-up’ direction. In other words, the discourse heavily emphasized on ‘putting the rural poor first’ in our list of priority and learning directly from them.

The Genesis of the Document

Since the late 1990s, a lot of new literature on the theme of Sustainable Livelihoods started coming from the mainstream agencies such as DfID (Department for International Development). On closer scrutiny, we found that the DfID had adopted and expanded on the conceptual schema and practical tools proposed by the original SL discourse, and had started calling it the Sustainable Livelihoods Framework. DfID appeared to have put in lot of human and financial resources in expanding the conceptual debate and mainly the practical tools based on the SL framework.

The subsequent study of DfID’s efforts brought out many problematic aspects of this effort. First, after studying the literature produced by DfID on SL Framework, we found that, though the framework of SL was adopted, many of the crucial issues that were raised in the original formulations such as security of livelihoods, access to resources, or the distributional issues were either missed out or de-emphasized in DfID’s SL framework. These were the issues that were of the main concern of the rural poor and the grassroots organizations working with them. Further, DfID’s White Paper (1997) clearly stated that globalization and sustainable livelihoods could go hand in hand, which was quite opposite with what was experienced at the grassroots level. Third, we also have found that, using the SL Framework that was expanded by theorists based in UK, the DfID started implementing it in developing countries in Africa and Asia, through governments and big local NGOs. There was hardly any serious effort to involve—in a serious and meaningful manner—local academic institutions, governments, or the local civil society organizations in the process of expansion of the discourse or practice. On the basis of these three worrisome observations, we came to conclusion that, the DfID’s efforts would effectively prove counter-productive to the objective of ‘sustainable livelihoods security.’ It would result in reinforcing the ‘top-down’ flow of developing thinking and practice, in turn, marginalizing the ‘poor’ and their organizations in deciding their own course of development. Hence, it would effectively amount to appropriation of the oppositional SL discourse and utilizing it for legitimizing the agenda of globalization.

On this background, we felt the need to reclaim the original content of the sustainable livelihoods perspective, which emphasizes on the security of livelihoods of poor and on the ‘bottoms-up’ direction of discourse and policy planning. It is imperative to put this sustainable livelihoods perspective at the center stage of the development debate at national and international levels. In the era of LPG policies, the objective of urgent and significant improvement in the lives and livelihoods of disadvantaged sections needs to be brought back as the primary concern guiding debate and actions on economic and environmental matters. This would require rethinking of the conceptual and theoretical formulations on development—relying heavily on the original SL discourse—and putting these reconstituted

formulations at the center-stage of the debate and action. Preparing this document is a small attempt in this direction.

We also felt that the exercise of conceptualization and articulation of Sustainable Livelihoods Perspective (SLP) would require the context of ground reality and should be evolved from the understanding and insights of the grassroots level people. The grounding of development debate and action would require close involvement of civil society organizations (or CSOs) and grassroots-level organizations (or GrOs) working on the issues of security and sustainability of MVS in the society. Therefore, we decided to initiate a participatory process with GrOs and CSOs to articulate a formulation of Alternative Development Perspective (ADP). It was decided that the ReLi group of Prayas would articulate a formulation of 'Sustainable Livelihoods Perspective' (SLP) through internal exercises, which would include extensive literature review, discussions among group members, and using previous experiences of group members. This formulation could then be used as a base document or a proposal for initiating discussions during the participatory process with CSOs and GrOs. We felt that the ADP evolved through such a broad and participatory process would have greater legitimacy and will be owned by a wide range of individuals and organizations, including GrOs. This would lead to an increased commitment on their part to play an active role in dissemination of the ADP.

The Framework for Analysis

The entire development discourse could be seen as the debate between three broad schools of thoughts or three standpoints, viz., mainstream, reformist, and radical. The conventional development model—comprising the principles of maximization of macro-economic growth and trickle-down—has maintained its mainstream status for the last five decades. The mainstream standpoint is shared by early developmentalists, as well as by the advocates of the recent LPG policies.

The reformist and radical standpoints emerged as reactions to the failure of mainstream standpoint. Both are defined by their disagreement with certain aspects of the mainstream development model, although there are significant substantive differences between the two standpoints. We find a lot of variations within the schools as well as and changes in topics and issues taken up by these schools.

The reformist standpoint adopts a moderate theoretical position arguing that certain aspects of the mainstream model, especially its neglect of environmental and equity concerns, have hindered the development process. While the reformist standpoint finds nothing essentially wrong with the core of the mainstream model, it sees the need for timely and appropriate corrections in the model to address the problems accompanying development.

The radical standpoint concludes that there are fundamental problems with the mainstream development model and the development practice that emerge from it. These problems cannot be resolved through reform because they stem from inherent contradictions in the core ideas and practice of the mainstream model. It emphasizes the need to follow an entirely different development model to solve these problems. Beyond this core argument, there are many differences among the diverse schools within this standpoint. These schools represent critical social/political thinking including socialism as well as different shades of

feminism and radical environmentalism. Some radical formulations are well articulated and influence the debate at international level, whereas some are well articulated but remained at local level.

To begin the proposed effort of articulating a formulation of the SLP, it was necessary to consider at least the major portion of the core of the development debate and use it as the foundation for the formulation of the SLP. Comprehending and analyzing even the core of the development debate is a mammoth task. To handle this task in an appropriate and capable manner, a framework was required, which would be comprehensive enough to cover the entire core of the debate. The framework would also have to be able to conduct the analysis of the debate in a manner that will be helpful in evolving the SLP. The SLP, thus evolved, is to be used as the base-document for the participatory process of CSOs and GrOs to articulate the alternative development perspective. The framework evolved by the Prayas ReLi group for this purpose is presented in this section. The framework views the development debate as the sum total of: (a) the mainstream position on development issues, (b) the critiques of the mainstream position on development from different standpoints, (c) the effort by the proponents of these standpoints to give alternatives to the mainstream position in view of these critiques, and (d) the critique of these suggestions for alternative by the protagonists of the mainstream position.

Thus, the framework proposes to dissect the entire development debate in four stages, marking each as one step in the framework. The four stages in which the development debate is broken down as well as the related four steps in the framework are: (i) the Mainstream Position (ii) Critiques of the Mainstream Position (iii) Alternatives from the Critics (iv) Critique of the Alternatives. Though not included in this Four-Step framework, the next and the fifth step will be evolving a formulation of the ADP using the analysis in the four steps.

In order to make the whole exercise more manageable, we made two decisions. First, we decided to focus only on the two aspects of the development model for our analysis. If we consider the development model as a whole, it could be seen as composed of four main spheres or aspects. They are: (a) the theoretical foundation, (b) the conceptual core of the theoretical foundation, (c) the (development) practice, which means how the development is actually practiced, and (d) the conceptual core of the practice of development, or the strategies of development. Because we are only concerned about the 'perspective' at this stage, we decided to include the second and the fourth aspects from the above list, i.e., the conceptual core and the strategies of development. In fact, even among the two, we decided to focus mainly on one of the aspects, viz., the conceptual core of the model.

Second, between the two standpoints, which are critical of the mainstream position—the reformist and the radical—we decided to include critiques only from the radical standpoint in our exercise. This decision was based on two reasons. The first reason was that the radical critiques provide us with more fundamental critique of the mainstream position, as compared to the reformist critiques, which would improve the quality as well as the utility of the whole exercise. The second reason was that the grassroots activists whom we wanted to involve in the participatory process are found to be closer in their understanding to the radical positions on environment and development.

Here, it must be noted that the all radical critiques and alternatives are not well articulated in the available literature. Often, they are expressed in discussions, pamphlets, and

speeches. However, at this stage, we have not considered these indirect / non-conventional sources. This could be one of the main lacunas of this document.

Thus, the framework comprises the following four steps: (i) the Mainstream Position (ii) Radical Critiques of the Mainstream Position (iii) Alternatives from the Radical Critics (iv) Critique of the Radical Alternatives. But this is just one dimension of the framework. There is another dimension to this framework. The framework sees the entire development debate as composed of the following four major components: economic, political, socio-cultural, and epistemic (or knowledge). In other words, the debate over the conceptual core of development models is composed of these four ‘substantive’ components.

These four ‘substantive’ components are further divided in terms of elements in the debate within these components. These elements essentially are the major issues around which the debate is often found to be revolving. For example, within the economic component, the debate is found to be revolving around the main conceptual elements such as the market, competition, private property, whereas in the political component, one of the main elements in the debate is the role of the institution of the state. This element-level analysis or dissection was found to be necessary in order to make the analysis more in-depth and to bring more clarity in the debate. It is expected that this would make the proposed formulation of the alternative more detailed and systematic.

About the Document

Following this scheme of dissection of the development debate, the core section (Section 4) of the document is organized into four major sub-sections, each devoted to one of the four ‘substantive’ components, viz., Economic, Epistemic, Political, and Socio-Cultural. And within each sub-section, the debate is further divided into the four above-mentioned steps. In each step, effort is made to present the discussion dissected to the level of main conceptual elements. The reader could also trace the debate in four steps of the framework to see how one particular element goes thorough all the four stages of the debate. Often, it is not possible to trace this passage beyond two stages. This is because, as mentioned before, the radical alternatives [Stage 3] are not always well articulated.

This core section is followed by another major section of the document (Section 5), in which (based on the discussion in Section 4), the formulation of the Sustainable Development Perspective is presented. In this section, effort is also made in the last two subsections to provide some idea of the strategic aspect of the Sustainable Livelihoods Perspective.

These two sections are preceded by three sections, which provide the context and foundation for these two main sections. After the introduction in this first section, Section 2 describes the conceptual core of the mainstream perspective on development. Section 3 presents a brief introduction to the reformist standpoint and some schools of thought from the radical standpoint.

Though we have tried to at least touch upon various arguments we came across in the available literature, we have not been able to give proper justice to the arguments of the eco-feminist school as well as the Gandhian School. This was mainly because we have not been able to find the adequately articulated suggestions for the alternatives from the eco-feminist

school, whereas in the case of Gandhian School, we needed some help from Gandhian school to hone our understanding of the school further.

Thus, the present effort is a first-of-its-kind effort to analyze the development debate and evolve an alternative perspective based on this debate. Though it has certain limitations and requires considerable improvement, it is hoped that it would be found useful by researchers and activists in the field.

Before we end, we want to acknowledge and express our gratitude to scores of people who have been helpful in direct and indirect manner in this endeavor. These people include the authors of the literature we have used and learned from as well as researchers, students, academics, and activists who helped members of the ReLi group in direct and indirect manner. We cannot name all of them here, but want to mention names of two people who helped this effort immensely—Mr. K R. Datye of Mumbai, India and Prof. John Byrne of University of Delaware, USA.

Section 2: Conceptual Core of the Mainstream Perspective

2.1 The Conceptual Core of the Mainstream Perspective

This section focuses on the conceptual core—the defining characteristics—of the mainstream perspective. The conceptual core, as depicted in Figure 1, has a three-layered structure comprised of, in all, five elements. The foundation layer of the conceptual core contains two elements: epistemic and techno-economic, while socio-cultural and political elements are in the middle layer. The apex element or the heart of the conceptual core is the operationalized objective in the mainstream development perspective—macro-economic growth.

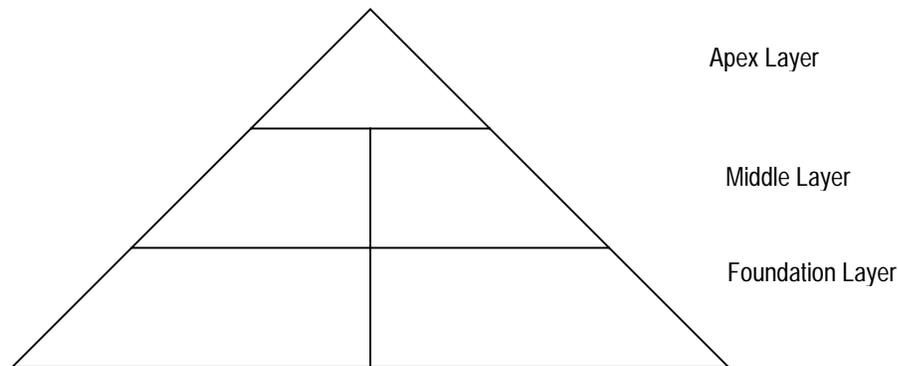


Figure 1: The Conceptual Core of the Mainstream Development Paradigm

2.1.1 The Foundation Layer of the Core

The epistemic element, i.e., modern scientific knowledge-system, has three important components: (a) the modern epistemology that includes modern scientific world-view and methodology; (b) the body of modern scientific knowledge about physical and social reality; and (c) modern scientific and technological tools and techniques (software and hardware).

First, the modern scientific world-view is often termed as mechanistic or positivist. The mechanistic world-view underlying the modern scientific knowledge-system essentially proposes that: (a) the apparently holistic and autonomous elements of reality (physical and social) can be studied and understood by breaking them down into their components; and (b) if, after such studies, properties and behavior of these parts are aggregated, it is possible to predict the properties or behavior of the whole. This is often contrasted with the organic world-view of pre-industrial societies, which essentially sees the autonomous elements of reality as organic and indivisible wholes.

The positivist world-view further maintains that a single, tangible reality exists ‘out there,’ and properties of various elements of the reality (social as well as natural) are governed by some objective and fixed laws that are universal. Further, it proposes that it is possible to remain independent of the reality and discover these laws and predict (and hence control) properties and behavior of natural and social entities. The scientific methodology is

the method to arrive at “scientific” laws by separating them from the general statements. It is claimed that, the methodology allows any observer to arrive at the same conclusions about reality. The methodology can be broken down into two steps: formation of hypotheses and their testing. According to the modern scientific methodology, while formation of hypotheses could be an inductive activity, the testing of hypotheses can be conducted only on the basis of the criteria of empirical observation and experimental evidence. In doing so, the methodology distinguishes itself from commonsensical generalizations from everyday life.

The second component in the epistemic element is the body of modern ‘scientific’ knowledge about natural and social reality gained by using modern ‘scientific’ methodology. According to the claims of this methodology, ‘scientific’ knowledge is not subjective but objective—i.e., independent of the observer or the context in which it is observed—and is universally applicable. Hence, it is supposed to be value-neutral and has no ethical, political, or ideological implications of its own. As a result, it should be accorded with immunity from any critical examination on social, political, cultural, and ethical grounds. Because of its claims to being ‘objective’ and ‘universal,’ the modern ‘scientific’ knowledge renders all other dissenting interpretations of reality as unscientific and, hence, not ‘true.’ If there are internal contradictions, inconsistencies, or factual discrepancies within the body of scientific knowledge, then they are due to the inadequacy of the present level of scientific knowledge and do not have any bearing on the claims about existence of objective and universal laws or about the scientific methodology being the only methodology of gaining ‘true’ knowledge. The solution to these contradictions, according to this view, lies in creating more ‘science’ and being more ‘scientific.’

The third component of the epistemic element is the scientific and technological tools and techniques (software and hardware). These tools and techniques are accorded attributes similar to those accorded to ‘scientific’ knowledge. These tools are supposed to be ethically and socio-politically neutral tools, and, as a result, they could be used by anybody, anywhere, and anytime to get the same effect, independent of the contexts in which they are applied. Many theorists and activists have challenged these claims of modern science and technology by questioning their historical validity, epistemological soundness, and practical implications.

In short, the modern “scientific” knowledge system provides various theories, methods, and tools that, according to its claims, are value-neutral, and could be applied universally to achieve and to justify the objective of development.

The techno-economic element of the conceptual core involves three factors: industrialization of economies, technological sophistication of industries, and rational organization of businesses. Industrialization of economies implies removing agriculture (especially subsistence agriculture) from the central position it occupied in traditional economies and replacing it with the capitalist industrial sector as the main source of both commodity production and employment opportunities. Especially in the initial stages of development, the heavy manufacturing industry is looked up to as not just the main source of employment and production but also as an element essential for laying physical infrastructure, developing markets, increasing exports, and raising living standards. Industrialization, because of its phenomenal productivity, is considered as the only way to

achieve surplus generation and value-added production that are required for getting onto the self-propelling spiral of the expanding economy.

In order to survive in market competition, industries in developing economies need to produce more and more, better and better, bigger and bigger, and with increasing economic efficiency. This objective necessitates continuous technological sophistication in the industry, and it means that not just traditional but even comparatively modern technologies would get obsolete very fast.

To survive in the competitive markets, business in developing economies need to reorganize on the basis of economic rationality which means that they need to become professional, capital-intensive, large-scale, and integrated in larger economic system. This, in turn, requires elimination of traditional small firms, traditional business elements, and traditional business practices with simultaneous growth of big and powerful business houses.

2.1.2 The Middle Layer

In the middle layer of the conceptual core of the mainstream perspective, there are two elements: socio-cultural and political. The socio-cultural element involves modernization of traditional societies and cultures. The idea of modernization is based on the assumption that, in order to develop, all societies must necessarily traverse the similar path taken by the Western societies, albeit at a different pace. This assumption further implies that development necessarily means not just acceptance of the industrialization of economy and technological sophistication of industry coming from the West, but it also means acceptance of Western social norms, values, and institutions. Modernization is often used to encompass even the economic and epistemic aspects of the core.

The second element in the middle layer, the political element, acquires somewhat secondary status because, according to the mainstream development perspective, politics has no significant role to play in bringing about development. Rather, depoliticization of development is the prime theme in the mainstream theories. In this perspective, the state is supposed to play the role of a “night-watchman,” and allow the market to operate according to its own logic and to guide the economy in the direction of its own choice. Intervention by the state is seen as an interference that is detrimental to the health of economy and to development. Nonetheless, in certain periods, according to the mainstream perspective, the state is expected to play an active role, especially when it comes to investing in the physical and social infrastructure. However, according to the most recent prescriptions within the mainstream perspective, the state is a pariah. These prescriptions are based on the concepts and ideas—such as “structural adjustments,” “liberalization, privatization, and globalization,” and “economic reforms”—offered by neo-classical economics. These new prescriptions of the mainstream perspective, favored by the international mega-institutions like the World Bank and the International Monetary Fund, require the state in “developing” countries to completely withdraw from the development scene.

2.1.3 The Apex Element

This brings us to the apex element of the conceptual core—macro-economic growth. This is the operationalized objective of the otherwise vague term “development.” Macro-economic growth—typically measured by the Gross National Product (GNP), fueled by

industrialization, and facilitated by modernized societies and cultures—is considered as the primary motive force of development according to the mainstream perspective.

However, many researchers and activists have suggested that this implicit assumption—that economic growth will spread to all societies and will trickle down even to the lowest sections of societies—has proved false and has conveniently been forgotten. As a result, development has become synonymous with economic growth.

2.2 Interconnectedness of the Core

The five major elements of the conceptual core are interconnected and support each other to serve the ultimate objective of economic growth. The mechanistic world-view provides logical, and, at times, ethical sanction to all the other elements. Taken together, mechanistic world-view and modern scientific methodology create the body of modern scientific (natural and social) knowledge and the modern scientific and technological tools and techniques. These scientific knowledge and techniques provide the epistemological base and facilitate implementation of techno-economic element. Further, these two foundation elements, together, dictate changes in society (and culture) and politics. The industrialized economy--supported by modernized society and culture and protected by the collaborating state--would be geared to serve the goal of continuous macro-economic growth, which is equated with development.

Section 3: The Alternative Perspectives

3.1 The Reformist Perspective

The reformist perspective on environment and development debate adopts a moderate theoretical position arguing that certain aspects of the conventional perspective, especially its neglect of environmental and equity concerns, have hindered the development process. While the reformist perspective finds nothing essentially wrong with the core ideas and concepts of the conventional model, it sees the need for appropriate corrections to address the problems accompanying development such as greater state intervention to monitor and control environmental damage caused by the conventional development strategies.

3.1.1 The WCED Formulation

One prominent formulation of the reformist position comes from the World Commission on Environment and Development (WCED)--popularly known as the Brundtland Commission. Though the other reformist formulations on these issues somewhat differ in their arguments, their core position remains the same. We attempt to summarize the reformist formulation presented in the WCED Report.

3.1.1.1 The Diagnosis

In its analysis of the crises, the Report discusses four important factors involved in the environmental crisis: poverty, economic growth, survival, and economic crisis. It articulates the interconnectedness of environmental degradation and economic development, and emphasizes the recent concern that environmental degradation dampens or reverses economic development. It suggests that the economic crisis, closely linked to environmental degradation, has severely affected the poor in developing countries. In analyzing the environmental and development crises, the Report emphasizes on their “interlocking” nature. According to the Report, the “fragmented institutions and policies” that are inadequate to handle the interlinked and complex challenges further aggravate these crises.

3.1.1.2 The Prescriptions

On the conceptual level, there are two main elements in the prescriptions of the WCED Report: (a) the concept of “sustainable development” which the report advocates as the theme for future environment and development theory and practice; and (b) strategic imperatives that should guide the future policy design exercises. In addition, it also discusses the mechanisms for this transition to “sustainable development” in the form of “institutional and legal changes” based on “international cooperation.”

3.1.1.3 The Concept of Sustainable Development

The concept of sustainable development presented by the Report is rooted in its diagnoses, which identifies links between environmental destruction, economic growth, and continued deprivation in the South. The oft-quoted definition of sustainable development in the Report is:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generation to meet their own needs.”

The Report further explains the concept of sustainable development through a discussion of certain implications or “requirements” of sustainable development. The first such requirement is the satisfaction of the basic needs of all. For satisfying minimum needs of the poor in the countries of the South, the Report visualizes an important role for economic growth. But for the industrialized nations, it suggests two major and very important criteria for economic growth: ‘principles of (environmental) sustainability and non-exploitation of others’.

3.1.1.4 The Strategic Imperatives

In the context of this analysis and the definition of sustainable development, the Report provides seven strategic imperatives that nations must take into consideration to make changes in policies and strategies to move toward the goal of sustainable development. These imperatives include:

- (i) Reviving Growth
- (ii) Changing the Quality of Growth
- (iii) Meeting Essential Human Needs
- (iv) Ensuring a Sustainable Level of Population
- (v) Conserving and Enhancing Resources
- (vi) Reorienting Technology and Managing Risk
- (vii) Merging Environment and Economics in Decision Making

3.1.2 The Reformist Character of the Prescription and Its Appropriation

First, the concept of sustainable development is called by many a new buzzword. It now has become the theme that has given rise to an entirely new set of reformist formulations and has become a new context for discussions on the environment and development issues even in the mainstream institutions and business sector. In being so, however, the concept illustrates the strengths and weaknesses of the typical reformist formulation. On one hand, it has won such a wide acceptance because it is flexible and vague allowing a wide range of conventional (in addition to reformist) thinkers and planners to find it comprehensible, acceptable, and ‘practical’. However, this flexibility coupled with the conceptual and ideological similarity with the conventional theory and practice, on the other hand, has made the concept vulnerable to diverse interpretations and subsequent appropriation.

Second, as far as the ‘strategic imperatives’ are concerned, at the top of the list is economic growth (‘reviving growth’) with adjunct suggestions to improve it qualitatively by making it less harmful to nature and human beings. However, top priority accorded to “*reviving* growth” betrays the reformist nature of prescriptions of the report, which does not touch the core of the conventional perspective-economic growth. While there is a reminder to the countries in the South about the growing populations in one element (‘sustainable levels of populations’), the remaining three imperatives of the list mainly focus on suggesting reforms and modifications in the current economic and technological systems by bringing in environmental considerations.

Finally, though the WCED Report discusses local communities, people's participation, and basic human needs, its proposals for actions in its prescription rely on modification of the macro-level institutions and legal structures with naive rhetoric of international cooperation.

As a result of their reformist character and their resultant vulnerability, such prescriptions always face the possibility to fall prey to appropriation by the conventional perspective.

3.2 Perspectives from Radical Environmentalism of Euro-American Origins

Radical environmentalism is a multi-stranded philosophy. Different schools of radical environmentalism have developed a detailed and thorough critique of the conventional development perspective. These schools believe that there are inherent contradictions in the idea, theory, and practice of development. According to radical environmentalism, we need an entirely different development model that will lead to more just, environment-friendly, and humane society. To rectify the fundamental problems that lie with the conventional development perspective, different alternatives have been suggested. These radical environmental schools of thought could be divided in two groups, viz., schools of the Western or European-American origins and schools of the Indian origins.

There are four major radical schools of environmentalism that are of Western or European/American origins: deep ecology, social ecology, eco-socialism, and eco-feminism. This sub section very briefly introduces these perspectives.

3.2.1 Deep Ecology

Deep ecology is often called the mainstream of radical environmentalism. Deep ecology distinguishes itself from the other strands of "shallow"--i.e., human-centered--environmentalism by totally rejecting the human-centeredness embedded in modern Western civilization. Instead, it espouses "eco-centeredness" and suggests fundamental restructuring of human societies by integrating them with nature and conducting human affairs in accordance with the laws of nature.

3.2.2 Social Ecology

Social Ecology and Eco-Socialism are the two strands of radical environmentalism, which have close links with the "leftist" human-centered concerns. According to the fundamental argument of Social Ecology, the roots of environment-development crises could be traced to the domination within human societies and domination of nature by human society. Both of these types of domination are interlinked, and both have evolved together. The major focus of Social Ecology critique is on the "hierarchy" in relationships within human societies, and between societies and nature, which is seen as the expression and instrument of domination. The principle prescription from Social Ecology is "remaking society" through conscious social struggle against all forms of domination within human society, and of nature by humans. This will liberate both the human society and nature from the present maladies.

3.2.3 Eco-Socialism

The Eco-Socialist position emphasizes the political economy aspect of the environment and development crises. According to Eco-Socialism, Marx' analysis of capitalism and his prescription for an ideal "communist" society still form the basis for the efforts to resolve the environment and development crises. Beyond this basic position, Eco-Marxists have many differences. For example, there is disagreement over a proposition that, while pointing out the exploitation of industrial labor, Marx failed to lay equal emphasis on the appropriation of nature, women's unpaid labor, and resources and markets in colonies by capitalism. Nonetheless, according to the Eco-Socialism, the Marxist legacy has two important attributes to offer to the green thought and action: its commitment to social justice and its "broader" political vision and program.

3.2.4 Eco-Feminism

The fourth radical school, eco-feminism draws heavily from all the other three radical theories while maintaining its own basic position. The basic eco-feminist position could be briefly summarized as: the institution of patriarchy, together with capitalism/ industrialism, dominated nature and women by depriving women of their control over natural resources which were appropriated for commodity production and maximization of profit. The Eco-Feminist prescription is gynocentrism i.e., according centrality to women, their knowledge, and their production and reproduction related activities. Starting from this position, the eco-feminists have developed a rich and diverse environment-development discourse often drawing from the other radical thoughts.

3.3 The Radical Perspectives of the Indian Origins

There are two major radical perspectives of Indian origin that we intend to include in this document, viz., the Gandhian perspective and the perspective of Phule and Ambedkar.

In a way, Gandhian perspective is somewhat known in the development debate even at the global level, though it has not been part of the global debate as yet. We have plans to involve the scholars of Gandhian thought in the effort to integrate Gandhi's idea in this debate. As the first step, we have prepared a small note on Gandhian Perspective, which is included in Annexure I.

In the case of India, one crucial element in the debate on development will have to be the institution of the caste. Most mainstream and most radical thinkers from the socialist, environmentalist, and feminist schools have chose not to consider this aspect seriously. However, we feel that debate on development in the context of India cannot be completed unless we include the dimension of caste in the debate. However, we feel quite incapable, in the framework of this project, to undertake this task. Mahatma Jotiba Phule and Dr. Babasaheb Ambedkar were two leading visionaries who have worked on this dimension. We hope to attract the scholars of Phule and Ambedkar thought in this endeavor during our participatory process we are planning in the year 2004. For the benefit of readers who are not aware of the work of these two thinkers, we have included a brief introduction to the thinking of Phule and Ambedkar in Annexure I.

Section 4: The Four-Step¹ Analysis of the Development Discourse

4.1 Introduction to the Framework

The 'Four-Step' framework for analysis of the development debate is a unique tool devised by the authors of this report. The four steps in the framework are: the Mainstream Position, Critique of the Mainstream Position, Alternative Positions, Critique of the Alternative Position. The framework is expected to be helpful in tracing the conceptual evolution of the development debate. It allows establishment of logical linkages among various conceptual elements of the arguments across various perspectives. The framework is neutral towards the perspective of the analyst using the framework. Thus, it will help the user to identify the logical shortcomings or logical strengths of the arguments in the debate, while looking from her or his standpoint. It is expected that such an examination of the debate will help the examiner to refine her/ his old arguments or evolve new arguments. In a way, this framework could also be a very useful interactive training tool. The presentation of the development debate through this framework will introduce the debate to novice trainee in such a manner that the trainee would be able to develop her/his own version of the 'alternative development perspective.

In this section, the entire conceptual debate on development is divided into four main components of the development perspective, before applying the Four-Step framework. These components are: Economic, Epistemic, Socio-Cultural, and Political. Other than these four, Ethical Values (in implicit or explicit form) that are at the foundation of the perspective could also be considered as the fifth component of the debate.

Hence, the structure of this section is as follows. Arguments on various elements within each of the component of the debate are presented in the above-mentioned four steps. Section begins with the discussion on the Economic Component of the debate. The debate on the Economic Component is divided in the four steps: the Mainstream Position, Critique of the Mainstream Position, Alternative Positions, Critique of the Alternative Position. Similar exercise is repeated for the remaining four components, viz., Epistemic, Socio-Cultural, and Political.

4.2 The Economic Components of the Debate

4.2.1 Step I: The Mainstream Position

Capitalism emerged in the eighteenth century. With industrial revolution, fundamental changes in the organization and process of production took place. Industrialization and modernization are the simultaneous processes involving fundamental changes not only in the economic, political, and social organization of the society but also in the value system of society. It is said that the values like individualism, liberalism, freedom, and democracy are the products of 'industrial capitalism'. Several new processes like technological innovations, spread of markets, modern universal education, social and economic mobility

¹ The Four-Step method used here for analysis of the development discourse is explained in the introductory section.

Capitalism: Values and Processes

of markets, modern universal education, social and economic mobility, and the weakening of traditional elites, collectivities, and kinships shaped the human societies in the subsequent period.

Economic Self-Interest

According to the argument of the capitalist system, the unrestricted economic self-interest provides the strong motive for individuals—as well as the organizations (i.e., firms) they are part of—that is necessary to exert themselves and excel in their work while competing with each other for profits and jobs. This would not only open the doors of prosperity for the individuals, but will also automatically increase the overall efficiency and productivity of the economy as a whole. The resulting reduction in resource consumption and that in costs contribute to the overall well-being of the society and ecology.

Growth Orientation of Capitalism & Macroeconomic Growth

The capitalism is a growth-oriented system. It involves accumulation of wealth by earning profits, generating new capital from profits, and reinvesting the new capital to generate more profits. In order to maximize profits, every capitalist firm needs to capture the maximum possible share of the market (willing consumers) and to reduce per unit production cost. Both these require the firm to increase its production to the extent possible. On the other side, from the macro-level standpoint, it is believed that, this economic growth (which essentially means increase in production of goods and services) will bring in prosperity, which in turn, will prompt social progress.

Market-regulated exchanges are one of the significant features of the capitalist system. Unlike pre-industrial economic systems (wherein the economic exchange was dominated by barter), under the capitalism, economic exchange (or exchange of goods or services) takes place through the institution of market and is essentially monetized.

The Market: An Objective Mechanism

The market is seen as the most efficient and objective mechanisms for fixing the price of the good and services and hence for allocating the scarce resources. It is argued that, because market is the most efficient mechanism, productivity and production would increase only by removing restrictions on the market. Therefore, minimum intervention by the state (government) in market in particular and in economic activity in general is advocated. A claim is made that, under capitalism, consumer is sovereign as she or he is free to choose the quality, quantity, and price of the commodity she or he wishes to buy. Consumers are said to have freedom of choice.

Competition is an important characteristic of the capitalist system. In the situation of perfect competition, capitalist firms compete with each other for survival and profits, by increasing production and share in the market. The only way (in the situation of perfect competition) to achieve this is by offering the customer less price and

Competition: Benefits to customer and society

better service as compared to the competitor. This, in turn, is to be achieved by reducing costs of production and increasing efficiency. Thus, the competition is expected to benefit not only the customer, but even the economy and society as it entails efficiency increase. In the capitalist system, there is competition for labor, materials, and market.

Private Property / Private Ownership

Institution of private property precedes the capitalist system. However, in capitalism, the ‘right’ to private property emerged. (Locke mentioned ‘right to life, liberty, and private property’ for the first time). The institution of private property is expected to facilitate capital accumulation, by providing legitimization and security to the pursuit of unrestricted economic self-interest.

Division of Labor

As we have seen before, increased productivity is one of the most essential prerequisites for capital accumulation. Apart from technological sophistication, one of the most potent ways of increasing productivity (per worker) is through division of labor. This essentially means division of the production process into several specialized tasks and automation and routinization of these tasks via a production line. Efforts were and are being made to increase the efficiency of human laborer by applying time and motion theory. The process is expected to increase labor productivity of the production process.

Wage Labor & Labor Market

In the traditional system, the artisan worked in her or his own family enterprise. However, in the capitalist (more precisely industrialized) system, the artisan is transformed into a laborer who is selling her or his labor for wage to the capitalist owner of the enterprise. In a way, labor is also converted into a commodity, giving rise to a labor market, which allows the hiring of workers for production.

Large, complex Enterprises

The mainstream economic system is based on the functioning of large-scale economic enterprises. The large-scale enterprises are thought to be necessary to achieve the economies of scale, i.e., cost advantages of production on a large or mass scale. It is also argued that large and financially strong enterprises can invest in the research and development in science and technology.

4.2.2 Step II: Critique of the Mainstream Position

Greedy Self Interest: No guarantee for Social Well-being

The capitalist system is claimed to have based solely on greedy self-interest and profit seeking motives. In unfettered capitalism, commodities are produced primarily for the purpose of generating profits; their social usefulness and / or their impact on ecology are not the main considerations at all.

Thus, the assumption that aggregation of multitude of individual ‘economic’ decisions based on the ‘self-interest’ would automatically lead to social well-being and welfare is not true.

Growthmania:
Productionism

In a capitalist set up, continuous production is not prompted by the need of the consumers; it is the requirement of producers. This “productionism” (and its counterpart ‘consumerism’) is inherent in the objective of economic growth. Simply put, productionism is the single-minded pursuit of economic production of goods and services with total neglect of, and even at the cost of, other socially and ecologically relevant objectives.

Growthmania:
Recreating Economic
Inequality

It is argued that the nature of the goods produced in the capitalist system itself prevents their equitable distribution. Every year, industry floods the market with thousands of new products, scarce by definition, in order to devalue older models and reproduce inequality and social hierarchy. Thus capitalist production endlessly re-creates scarcity in order to recreate inequality and hierarchy, capitalist society gives rise to more unfulfilled needs than it satisfies.

Growthmania:
Threat to Social
Justice & Equality

Alternative perspectives claim that capitalism grew out of societies based on inequality and exacerbate that inequality, as it has no social considerations to guide itself. In the absence of any checks and balances or in-built counter-push against inequality, capitalism must continue to favor the profits and exacerbate the inequality. It is further argued that the centrality accorded to the macro-economic growth overshadows the objective of the basic needs of a large section of ‘the poor,’ which is the major dimension of equity.

Growthmania:
Wastage of Natural
resources

It is regarded as capitalism's 'inescapable failing' that it glorifies and requires continual economic growth. It is claimed that such expansiveness entails the inexorable consumption of finite natural resources and ultimately threatens the future of whole planet. Thus, Over-consumption of natural resources implicit in the capitalist system has resulted in degrading these resources to a large extent.

Private Property:
Exacerbating Inequity

The main criticism against the private property is that there was ample of community control on the local means of production and local natural resources in the traditional societies. This ensured usufruct rights for members of communities and provided some security of livelihoods for all members.

However, in industrial capitalism, as the consequence of the exhaustive rights to private owners, not only urban-industrial but even rural-natural systems are brought under strict control of a limited number of powerful individuals, eliminating the informal system of community control. This leads to further concentration of economic and political power in the hands of few and marginalization of large number of masses.

The main criticism against the market mechanism is that the market is not the objective and efficient mechanisms for allocation of resources as claimed. It works for those who have purchasing power and favors their choices.

Since seeking of profits is a deliberate and legitimate pursuit, the market under capitalism becomes a mechanism, or even accomplice, in that pursuit.

It is claimed that market in the capitalist system is not a neutral outgrowth of the pre-modern markets but has turned into a political creation, which acts as an oppressive means of distributing resources.

The anonymity and legitimization allowed by the market to the firms resulted into absence of constraints on the socially and environmentally destructive implications of capitalist production.

Market: An Instrument
for Oppression &
Inequality

As the market favors those who have more purchasing power, it exacerbates the inequality.

It is claimed that the principle of unfettered competition is unrealistic in most real-life situations so whatever is predicated upon it remains utopian.

Further, even if it is achievable, the unfettered competition results in the concentration and centralization of capital. This monopoly arises through a lack of competition, which paradoxically is the logical end-result of 'free' competition, when nobody intervenes to save 'inefficient' or unsuccessful producers from going out of business entirely.

Reality of Unfettered
Competition

The alternative perspectives also claim that competition is intrinsically anti-social, deadly to co-operation, and contrary to ecological principles.

The exploitative nature of capitalist system from the point of view of labor is severely criticized. It is argued that the laborers get paid only a small part of the surplus value created by their labor whereas the large part of the surplus value is appropriated by capitalists as profits. It is also argued that capitalism demands the maintenance of a 'reserve army of unemployed' that the capitalist firms can tap whenever they want. Therefore massive unemployment is regarded as endemic to the capitalist system.

Labor: Exploitation &
Unemployment

It is argued that the production system under capitalism results in the alienation of human beings. In a cash-dominated relationship, the work of laborers is reduced to the status of a commodity for sale in the market place. Thus, their work is objectified and commodified. Further, in the fragmented production process, work for laborer is chopped into small tasks to be repeated by the worker for years. This separates the

workers from their own creativity self. Thus, in the capitalist economic system, laborers get alienated from the products they create, from the rest of nature, from the other human beings and from their own selves.

Alienation of Labor

The alternative perspectives argue that the scale is of paramount importance in both human affairs and human-environmental system. It maintains that large-scale economic enterprises are dehumanizing because they not only dwarf the human beings, but also neglect needs, concerns, and priorities of human beings connected with the enterprises and make them slaves to the needs of the enterprise.

It is also argued that the large scale enterprise create concentration of economic and political power into few hands, which is used to further the interests of few by oppressing others.

The large-scale enterprises because of their size and recurring needs of resources create excessively large footprint on local natural resource system, often causing irreversible destruction of nature.

Large Enterprises:
Dehumanizing,
Oppressive, and Anti-
Nature

It is also claimed that all large-scale structures are self-destructive, as they eventually require more energy for their maintenance than the system can afford.

Capitalism based on industrialization involves over-consumption of natural resources and social degeneration. Radicals argue that the industrialized societies in the North could overcome these resource constraints and social aberrations in the later phases of industrialization only by exploiting natural resources, labor, and markets of the non-industrialized societies.

Gaining from
Colonial Exploitation

4.2.3 Step III: The Alternative Positions

4.2.3.1 The Alternative of the Socialist System

One of the alternatives suggested to capitalist economic system is the reorganization of society on the basis of *socialist system*. The doctrines of Historical Materialism and Scientific Socialism that came from Marxist tradition of thought have been the main guiding ideas in development of the socialist model of economic system. The core idea is that a particular type of means of production determines the economic system as well as the socio-cultural superstructure. Further, the criticism directed at exploitation of surplus value of labor by capitalist class owning the means of production led to the core element of the socialist system, viz., state ownership of means of production and hence state control on economy. The following are the main features of the alternative proposed in the form of the socialist system.

The Socialist alternative largely accepts the modern values that underlie capitalist system, except the value of (extreme) individualism. In socialist understanding, the human being is not seen as an atomized individual, but as a 'communal' being. Therefore, community relationships as well

Values as the class-consciousness and commitment to the vanguard party are valued in the socialist societies.

Economic Self-Interest No place for economic self-interest in the socialist system. In fact, service to the broader social objectives and values is considered as the adequate motive force for inspiring individuals to exert and excel in their economic activity.

Macro-economic Growth The Socialist System largely accepts the need for macro-economic growth. And hence the need to high level of increase in production of goods and services.

Private Property There is no place for private property in the Socialist System. All means of production and all assets are owned by the state and given for use to individuals or enterprises.

Market The market has no place in the Socialist System. The Market is replaced by the central planning which is the main mechanism for determination of prices and decisions on allocation of resources.

Competition As the market is replaced by the state planning in the Socialist System, there is no issue of competition. The competing firms in capitalist firms are replaced by the monopoly of state-owned enterprises in most sectors.

Secured Labor:
Community Ownership
of Means of Production The industrial labor is the class-conscious revolutionary class leading the revolution. Second, the means of productions are owned by the community. Third, there is no conversion of surplus value of labor into profit. The production is geared to produce socially useful goods. As a result, there is no question either of alienation or exploitation of labor.

4.2.3.2 The Alternatives from Radical Environmentalism

The proponents of different schools of radical environmentalism have come up with many suggestions and arguments for alternatives on many of the issues discussed above. There certainly are some differences in these suggestions; however, there are many commonalities and overlaps. In many cases (for example in the case of the eco-feminism), comprehensive model-level alternatives have not been suggested, though alternatives are suggested for various elements that are being debated. Efforts are made here to provide succinct but comprehensive coverage of these suggestions from radical environmental schools on alternative. Two (somewhat comprehensive) alternatives are discussed in the beginning. Later a brief item-wise list of alternative suggestions is presented.

In the alternative suggestions for the reorganization of the economy, a frequently encountered idea is *downscaling of the economic system*. There are three important model-level alternatives suggested: autarky, bioregional self-sufficiency, and the steady-state economy. The idea of *autarky* implies that each local community or region should produce to

satisfy its own necessities. It advocates that the interregional trade should wither away, except in a few scarce natural products, as moving goods over long distances require more energy. The principle of autarchy disparages exchange as it values intimate social relations untarnished by personal gains.

According to *bioregionalism*, autonomous human communities should organize themselves around some small-scale, naturally constituted, geographic region defined by certain distinct ecological characteristics (such as a small watershed area feeding a stream). In such ecologically holistic settings, it is argued, people would begin to understand their close and symbiotic relationships with the natural world and, in the process, also gain back the social harmony that is lost in the pursuit of development and modernization.

As mentioned earlier, capitalist and even socialist systems are growth oriented economic systems. To counter the ill effects of the present model of growth-oriented economy, alternative perspective suggests the solution in the form of *steady state economy* (zero sum economy). It is characterized by constant stocks of people and physical wealth maintained at some chosen, desirable level by a low rate of throughput.

The following are some of the major suggestions on alternatives to various economic elements discussed before.

Values	Most radical environmentalists affirm some of the values of the traditional societies. The major distinctive value is respect to nature and the concomitant values such as simplicity and thrift.
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Communitarian Interests and not Self- Interest	The radical environmentalists are together in their celebration of community spirit and sublimation of individual interest for the sake of communitarian interests.
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Low or No Economic Growth	As an alternative to the centrality to the macro-economic growth, many radical environmentalists suggest low rates of growth or some even suggest no growth at all.
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Community Rights or Control	Instead of private property or state ownership, the radical environmentalist emphasis on community rights or community control on natural resources and means of production. This is to be combined with the system of usufruct rights. For them, the traditional systems of common property resources hold great promise.
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Local Markets or Barter	Most radical environmentalists are very critical about the role Market plays in destroying environment. So they suggest going back to the barter systems of the traditional societies or limited market transaction at local level. Some suggest social or state control on the market.
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Instead of unfettered competition, radical environmentalists suggest an economic system based on the principle of interdependence. The system would rely on mutual, cooperation-based exchanges among

Not Competition but Interdependence

family-owned enterprises operating at local level.

Back to Artisan based Work System

Many radical environmentalists profess reinstallation of the production system with centrality to artisans creating products. They also emphasize self-production of goods required for simple living. This is seen as necessary to maintain the personal level integrity in the sphere of work and to avoid the danger of alienation suffered by laborer in the capitalist system. This system is also expected to reduce the exploitation of laborer.

Small-sized, Family Enterprises

As an alternative to the large-sized economic enterprises and centralized production system, radical environmentalists suggest decentralized system of production comprised of small-sized, family-owned enterprises serving primarily the local economy.

4.2.4 Step IV: Critique of the Alternatives

4.2.4.1 Critique of the Socialist System

The alternative of socialist economic system has been attacked on many grounds. The environmentalist critics claim that Marxian economists are no different from the mainstream economists. The Marxist economists use the same language as that of capitalism, which is evident in their fascination with macro-economic growth. They also use the similar large-scale enterprises and centralized production systems.

The critics also point out that in Marxist economic philosophy, labour is the sole source of value; natural resources as such have no economic value (similar to the proposition of the mainstream perspective). It is claimed that by assigning extremely low prices to natural resources, these will be wastefully employed in the Socialist economies, leading inevitably to needless environmental degradation. It is argued that Marx's view of history envisages 'unlimited' development of productive forces under socialism, which is contradictory to the ecological principles. It is also stated that, as a system, contrary to the Socialist critiques, capitalism thrives on equality of opportunity and that capitalist firms do not have uniformly short time horizons. The belief that workers and capitalists have fundamentally divergent interests is also challenged by the critics of the Socialist system. The following are the main arguments of the critics of the socialist system.

Deprivations due to Stifled Individuality

The critics of the Socialist system claim that overemphasis laid on collectivity in the Socialist system stifles individuals, leading to socio-cultural and psychological perversions and deprivations.

No Strong Motivating Force

The broader social objectives do not provide adequate motivation for individuals to exert and excel in their economic activities.

Negative Social & Ecological Impacts of

Omni-prevalence of state ownership alienates people from the social responsibilities and natural resources and results in a situation where social and environmental considerations are nobody's business.

State Ownership	This leads to severe social and ecological problems.
Inefficient Mechanism of State Planning	It is claimed that state planning has been proved to be an inefficient mechanism for fixing prices and hence for allocation of resources. This results in wastages in some sectors while scarcity in some sectors.
Negative impacts of Monopoly of State Owned Enterprises	Monopoly of the state-owned enterprises breeds many perversions such as inefficient performance, corruption. This leads to increased economic cost, wastage of resources, and non-performance in discharging social responsibilities.

4.2.4.2 Critique of the Alternative Ideas from the Radical Environmentalism

The critics of these alternative positions have posed many questions. The fear is expressed that the *local autarky* would force us back to early medieval economy in which vast majority of people lived in *dire poverty*. It is claimed that economic integration through extensive trade networks is beneficial for economic development and the future of ecological health. Further, it is argued that with the cessation of transregional economic connections, *ecologically benign technologies* would be *damaged* as severely as the destructive ones. It is stated that even in medieval times, more long-distanced trade was conducted than eco-radicals would allow.

The critics further claim that the bioregion is a construct of bad, outdated geography in which the region itself is consistently mystified and that geographers or ecologists delineate *regions or economic systems* that are always to a large extent *arbitrary*. With every bioregion producing its own food, it is claimed, the *nutritional standards* would also *decline* sharply. It is also argued that small-scale communities are seldom as humane and ecologically sound as eco-radicals portray them.

The concept of steady state economy has been attacked by many critics. It is claimed that recent economic progress has come to demand a certain *dematerialisation of value*, based on miniaturization and development of lightweight, energy efficient, composite materials. Thus economy can expand while significantly *reducing* its *consumption* of both *energy and key resources*. It is also argued that while global economy certainly cannot grow indefinitely in ‘*volume*’, it can continue to *expand in ‘value’* by producing better goods and services ever more efficiently. The critics emphasized that the *economic growth* of this type is *absolutely essential* as only a strongly expanding economic base can generate capital necessary to reshape our economy into one that does not consume the earth in feeding itself. They further argue that in a *growing economy, extra investments of wealth* can be channeled into *environmental protection*, whereas in a steady state economy, resources for pollution control must be diverted from other economic spheres.

Some of the criticisms of the alternatives suggested by the proponents of the radical environmentalisms are presented here.

According to the critics of environmental alternatives, the so-called values of simplicity and thrift are nothing but glamorization of poverty, which is regressive for human societies. It is also said that the

Glamorization of Poverty

environmentalist from middle classes from the North and the South have no right to impose poverty on millions of poor under the guise of such puritanical ideas.

Impractical Idea of Communitarian Interest

The idea of sublimation of self-interest and centrality to communitarian interests is found to be highly impractical. It is said that considering the basic human nature, the communitarian interests is not an adequately strong motivating factor.

Economic Growth Needed for Poor

The ideas of low growth or no growth are found to be originated from the ignorance of economic reality or insensitivity to plights of poor. It is argued that the poor of the world cannot be provided for their basic needs without economic growth.

Community Rights: Socially Regressive, Fragile Institution

It is argued that the institution of community (or common) property rights is a fragile institution and often lead to competition for mutual destruction (known as the ‘Tragedy of Commons’) It is also said that the system of community rights is socially regressive, as it makes an individual slave of collectivity and takes away her or his individual freedom.

Barter or Local Markets: Romantic & Economically Regressive

The idea of return to barter or local markets and abolition of the market institution is found to be romantic in the given reality. It is also said that, if implemented, it will be economically regressive, as it would lead to contraction of economies and return to wide-spread poverty

Economic Alternatives: Utopian & Regressive

Similarly, the alternative economic ideas suggested by radical environmentalists (such as the economic system based on interdependence, artisan-centered production system, and small sized family enterprises) are found to be not only utopian and romantic but also economically regressive. This is because they would lead to contraction of economies and affect economic growth and hence leave poor without any hope.

4.3 The Knowledge or Epistemic Component

In this component, the following four major elements are discussed using the Four-Step framework for the analysis: the Epistemological Premises, the World View, the View towards Nature, and the Modern Science and Technology. However, in the case of the first two / three elements, the fourth step of the critique of the alternatives is not presented. This is because we have not been able to find out articulation of these critiques in the literature we could find.

4.3.1 The First Epistemic Element: The Epistemological Premises

4.3.1.1 Step I: The Mainstream Position

The mainstream development thinking has been dominated by certain epistemological premises. The major premises are discussed here briefly.

Atomism is the premise that systems consist of parts, which do not change and that systems could be completely represented as the sum of their parts. Atomism has been very influential in how the mainstream perspective view understands the social world. This premise has reflected in western political philosophy, which emphasizes the individual and characterized societies as the sum of the individuals. Similarly, the western economic thought has stressed individual producers and consumers with supply and demand being the sum of their respective activities.

Atomism

Mechanism is the premise that the relations between the parts of a system do not change, that systems move smoothly from one equilibrium to another, and that the changes are reversible. Once the regularities (or in simple words rules) of a particular system are known, how the system would respond is predictable. And once we can predict the effect of different changes (stimuli), we can choose to impose the change that will have desired effect. The ability to predict and control is thus closely tied to mainstream belief in the premise of mechanism.

Mechanism

Universalism is the belief that the parts of systems and the relations between the parts have an underlying nature, which is the same everywhere and at all times. It is assumed that this underlying nature of things and relations could be interpreted by using a relatively small number of principles (or rules). For example, most industrial processes do operate in the same manner across time and space.

Universalism

Objectivism is the belief that natural and social systems can be understood and acted upon objectively. It is predicated upon the premise that it is possible to comprehend reality, as if it did not include the observer and that reality can be known independently of observer's values. Thus, science is about unchanging, real objects and the relations between them, which can be known 'objectively'. The Western science is widely believed to be 'objective' in the sense that it is only concerned with the facts about reality, which are separate from the value judgments that are different and 'subjective'.

Objectivism

Monism is the belief that there is only one best way for knowing any particular system. Monism denies the possibility of

Monism

multiple answers—stemming from alternative ways of thinking about the same problem—that are ‘right’ and at the same time, ‘contradictory.’

4.3.1.2 Step II: The Critique of the Mainstream Position

The alternative perspective has developed a thorough critique of the dominant epistemological premises. Some points of this criticism are summarized here.

Restricting
Understanding &
Limiting Abilities

According to the critics, influence of atomism restricts the understanding of individuals and societies to comprehend the reality, and hence, limits their ability to deal with it. For example, societies, under the influence of atomism, believe that problems could be divided into parts and then dealt with. Critics point out that problems of affluence, the environmental degradation, and health problems of industrial countries must be understood and dealt with as interrelated parts of one whole problem. However, the public belief in atomism legitimizes the position that fixing the parts is sufficient. According to alternative thinking, however, there is a need to address the whole system.

Problems Created
by Mechanistic
Solutions

The critics point out that it is a great mistake to assume that all the systems, especially the living systems (like ecosystems and societies) would behave according to the mechanistic rules. In such situation, the mainstream remedies based on the mechanistic principles do not lead to new equilibrium solutions. On the contrary, new problems (with new relationships between them) evolve. For example, when new technologies, values, types of knowledge, and ways of organizing are accepted by or imposed on cultures, the mechanistic view of cultures falsely assumes that a new cultural equilibrium will be reached. Instead, this imposition often leads to destruction or perversion of cultures.

Negative Impact of
Universalism

The Universalism is criticized because it leads to utter neglect of the location specificity as well as time specificity within the natural and social reality. As a result, actions guided by this premise often result in many unexpected negative social and natural impacts. Moreover, these impacts are often overlooked, as according to the belief in Universalism, they are expected not to occur. As an example, it could be said that universalism promotes—without considering its social and natural impacts—actions like management from afar, centralization, and large-scale factory-like operations with many laborers and with few who monitor, think, and manage.

Inseparability of

The critics point out that our values affect our choice of patterns of thinking for interpreting the reality. Therefore, the principle of objectivism is regarded as problematic. They argue that people as well as the manners in which they think, organize, and value things are clearly parts of a co-evolutionary process. To assume that people are apart from the processes

Observer &
Observed

they seek to modify is false.

Critics point out that there could be different ways of understanding complex systems, which would yield different insights. However, reliance on Monism ends up in arbitrarily throwing out possibilities and solutions, which conflict with the established knowledge but which may be just as good and reliable. The technocratic agencies dismiss alternative lines of reasoning that utilize different types of information, when they prove incongruent with the dominant patterns and premises.

Dismissing
Possibilities &
Alternatives

In cultural sphere, Monism disallows any basis for utilizing the knowledge of other cultures. Also, it is unable to look upon other cultures as equals, and this disrespect for other cultures hastens cultural narrowing.

4.3.1.3 The Alternative Position

The alternative development thinking is based on the alternative epistemological premises. These premises are described here in short.

Holism
not Atomism

Holism is the premise that parts cannot be understood apart from their wholes and wholes are different from the sum of their parts.

Non-Mechanistic
Types of Systems

Contrary to mechanism, according to the alternative premise, some systems might be mechanical and deterministic yet not predictable or smooth because they are chaotic or simply discontinuous. Some systems could also be evolutionary.

Contextualism
Not Universalism

Contextualism is the premise that phenomena are contingent upon a large number of factors specific to or a particular time and place. Many similar phenomena might well occur in different times and places due to widely different factors.

Subjectivism
not Objectivism

Subjectivism is the premise that systems cannot be understood apart from us (as observers) and our activities, our values, and how we have known and hence acted upon systems in the past.

Pluralism
Not Monism

Contrary to monism, the premise of pluralism is that complex systems can only be comprehended through diverse patterns of thinking, which, in themselves, are necessarily simplifications of the reality.

4.3.1.4 Critique of the Alternative

We have not been able to find out well-articulated critique of these alternative ideas on the Epistemological Premises.

4.3.2 The World View

4.3.2.1 Step I: The Mainstream Position: The Modern-Western World-View

The epistemic premises could be seen as shaping the perspective towards the reality in the world, which is called as the world-view. The world-view, which is at the core of the Mainstream model of development often called as the Modern-Western world-view to specify location and time of its origin. This is also to allow the possibility that there could be other world-views at that location and during that time.

Two critical characteristics of the Modern-Western world-view, are *separation* and *dissociation*. This world-view differentiates between *mind and body, subject and object, value and fact, spirit and matter, men and women*.

It holds that, because all *value judgments* are *subjective*, they are *unreliable* and they do not constitute 'proper knowledge'. It is claimed that it is not possible to infer or derive 'ought' from 'is', the *prescriptive* (value) from the *descriptive* (fact). Thus, 'normative' discussion about 'right' and 'wrong' about the decisions or acceptance of this as the criteria for decision-making are largely regarded as irrelevant. Political, economic, commercial, and technological decisions are backed by an appeal to '*objective*' knowledge in the form of facts, evidence, and probabilities.

Further, *instrumental values*, which are another characteristics of the Modern-Western world-view play a predominant role in western societies. Instrumental values are concerned with the utility of things as opposed to their intrinsic value.

4.3.2.2 Step II: Critique of the Western Worldview

The *western worldview* has been criticized by the alternative perspective. It claims that in the western worldview, the dualistic ordering of reality is also *hierarchical*. The principle of mind over body, subject over object, fact over value, men over women, and so on. Mind, subject, fact, spirit, men are categories which exercise *hierarchical control* and *domination* over body, object, value, matter and women. This duality set human beings *apart from* and *over nature*, thus opening the way for a relationship that is primarily *exploitative* and *manipulative*. This division has allowed the unrestrained development of science and technology, industry and militarism.

Because of the dominance of *instrumental values*, the western worldview tends to evaluate persons, objects, actions and all aspects of the natural world in terms of their use. The idea of *limitless maximization* is the key element behind much of the environmental malpractice.

The critics also point out that the Modern-Western world-view is *reductionist*, as it reduces the analogous, indivisible whole to an aggregation of its discrete parts, which is illusory. The eco-feminist critics claim that the reductionism reduces all value to market value, and register only those activities and processes that are monetized and involve cash

transactions. Reductionist economics assumes that only paid labor produces value. It provides the ideology of the gender division of labor such that women's work in producing sustenance is treated as having no economic value. Thus a *gendered economy* is created between 'productive' and 'non-productive' work.

It is also argued that the western rationalism has resulted into *denial of the spiritual needs* of human beings.

4.3.2.3 Step III: The Alternative: Holistic Worldview

Based on the alternative epistemological premises, the alternative perspective emphasizes the *holistic worldview* in place of the mainstream Modern-Western worldview. The holistic worldview believes that there is no independent observer *of* reality but only a participant *in* that reality. The classical disjunction between subject and object, value and fact, is invalid; the knower is implicated in the known and there can only be '*relative objectivity*'. *How* facts are investigated, selected, and interpreted depends on investigator's values, which are colored by how the investigator sees the world. The holistic understanding shows that no set of ideas is value-free.

Unlike reductionist thinking, *systemic thinking* maintains that the concept of 'part' as a discrete entity is really an illusion, which blinds us to the dynamics of the *relationships* involved in the system. In ecological sphere, it is stressed by the environmentalists that the unit of survival is not the organism, but the organism and its environment (the larger whole).

This *holistic world-view* points to an altogether more complex, dynamic model of world than Modern-Western worldview. The world is characterized by *organic, complex, dynamic, interrelationships*. Instead of linear cause and effect, the holistic world-view sees a complex web of *cyclical interconnections* across time and geographical space. Instead of a world analyzed into discrete parts, it sees relative wholes, which, by virtue of their organization, are greater than the sum of their parts. According to this world-view, *systemic model* can heal the mechanistic duality in human psyche and behavior.

The *ecological worldview* goes further to show that, as the world is based upon systematic processes and relationships, our values and actions should be consistent with systematic reality. It insists that we must infer prescriptions with descriptions, and that fact and value, far from being discrete, are in close relationship. It recognizes that we are intimately connected to the rest of nature both materially and spiritually.

It is argued that spirituality is essential to alternative worldview because it emphasizes the whole, the oneness and connectedness of human beings with nature and with each other.

4.3.2.4. The Critique of the Alternatives

We have not been able to find out well-articulated critique of these alternative ideas on the epistemological world-view.

4.3.3 Third Epistemic Element: View towards Nature

The radical critics, especially the proponents of environmentalist and feminist perspectives, have argued that the particular epistemology and world-view of the mainstream

model is also accompanied by a very characteristic view towards nature. The ecofeminists see modern science as an accomplice of the patriarchy in dominating and exploiting both, nature and women. They see both the pairs, the modern science and patriarchy on one hand and women and nature on the other as inseparable.

The eco-radicals have developed detailed critique of the view towards nature that is implicitly or explicitly expressed in the Mainstream development model. Let us begin with articulating the Mainstream view towards nature.

4.3.3.1 The Mainstream Position

The mainstream view of nature is influenced by the principle of *anthropocentrism*, i.e., situating human beings in a superior position over nature within value hierarchies. It holds that nature must be dominated, conquered, or managed to serve human needs.

Development is seen as a strategy to '*combat scarcity and dominate nature*' to bring material abundance. Capital accumulation through appropriation of nature is seen as a source of generating material abundance.

4.3.3.2 The Critique of the Mainstream Position

According to the critics, the mainstream view towards nature *reduced the capacity of humans to know nature*, because of its treatment of nature as inert and fragmented matter.

It is argued that the anthropocentric view towards nature *alienates human beings* from the environment on which their survival depends.

As a result of the anthropocentrism, the life history of natural structures becomes less important than the immediate benefits they could offer to 'man'.

The view also leads to imagining of a power relationship between human and nature. As a result, human beings are seen to hold *power over nature*. This power should be used to *improve humankind* by extending nature's limits.

According to the critics, in mainstream view, nature is seen—instead of as a mother nature—as a *source of economic scarcity*. It is seen as *valueless* and *dead* unless developed by men. It also makes technology a *superior substitute for nature* and hence a means of producing growth, unconstrained by nature's limits.

4.3.3.3 The Alternative Views of Nature

Different eco-radical perspectives have different views of nature. Hence, they need to be described distinctly.

According to Social Ecology, nature is viewed in terms of continually on-going and mutually interdependent processes towards the emergence of new levels of complexity and diversity. The logic of these processes is *participation, mutualism, and symbiosis*, and the aim of evolution is ever-increasing *diversification*. Differences are not seen as a basis for conflict but for creative integration.

Secondly, it sees nature as a *realm of freedom*. Freedom means self-determination and is expressed in a preservation of identity and difference. Thirdly, nature and society are

perceived not as conflicting opposites but in terms of *continuities* and *interdependencies*. The need of reconciliation of humanity with nature is strongly expressed.

Deep Ecology proposes to replace anthropocentric hierarchies with *biocentric egalitarianism*. It sees richness and diversity of life as values in themselves and assumes that human beings have no right to reduce these, except to satisfy their basic needs. The alternative thinking maintains that, far from treating nature as a source for humanity, we should be maintaining the diversity of the biosphere *as an end in itself*.

Eco-feminist perspective emphasizes the association of women with nature. *Connectedness* and *mutualism* are perceived to be inherent in women's ways of knowing. It sees both, women and nature as oppressed and subjugated, the victims of patriarchal power structures. It claims that women's essential features, such as empathy, caring, and female ways of knowing, which are based on connectedness, can help to develop, better, less violent, and more sustainable ways of living and of social relations.

Earth-based consciousness (articulated by eco-feminism) is awareness of our oneness with the life of the planet. It sees earth as a living thing. We are all part of that life; we all are inter-connected.

4.3.3.4 The Critique of the Alternatives

We have not been able to find out well-articulated critique of these alternative ideas on the epistemological world-view.

4.3.4 The Fourth Epistemic Element: Modern Science and Technology

4.3.4.1 Step I: The Mainstream Position

The Modern-Western science (henceforth referred only as the science) is defined as the knowledge about the reality surrounding (including nature) and within human beings. Modern-Western Technology (henceforth referred only as the technology), then, is seen as the way to utilize this knowledge in order to make life of human beings prosperous as well as secure and stable against the vagaries of the nature.

In the mainstream development model, evolution of the science and technology is considered such an important element that it is often equated with development by many proponents. The processes of industrialization and modernization—that are highly valued as cornerstones of the development process—are possible only because of the advancements in science and technology. As a result, the science and development are regarded as universal categories of progress, which the non-western world should also imitate. Some important features of the science and technology are as follows:

- In the development process, technology has multiple roles to play.
 - First, it is expected to facilitate mass production, which is the key element of industrialization.
 - Second, it is expected to result in continuous enhancement in technical efficiency, and replacement of labor, allowing reduction of costs of production.

- Third, technological innovation is also expected to reduce the physical labor, risks, and drudgery at the work-places as well as in homes.
- In addition to this ‘economic’ role, the technology is expected to facilitate the socio cultural processes such as urbanization and modernization.
- In fact these processes are predicated upon the technological advancement. Thus, it is believed that technological innovations will result in improving not only human wealth but also the human welfare and progress.
- The Modern-Western science is defined as ‘unique’ and ‘true’ as well as universally applicable.
- Both, the science and the technology (engendered from the science) are seen as being independent of society both in their structure and its evolution. In other words, the course of evolution of science and its structure are self-determined.
- Because the science is the uniquely true knowledge, it is considered as without any blemishes caused by motives or politics among human beings. In this sense, it is considered as ‘pure’ or ‘pristine’. Similar is the status of the technology, which emerged from the ‘pure’ science.
- Further, because it is ‘true’, independent of ‘human’ societies, it is also considered as beyond the scrutiny of the human beings and their morality.
- Further, accepting the ‘modern scientific perspective’ is also seen as the way to get rid of traditional (pre-modern) institutions and culture and way for ‘cultural modernization’ and emancipation from tyranny of pre-modern culture.

Thus, in short, according to the mainstream view, development of the science and technology will result in *increase of economic wealth* and consequently, in *improvement of standard of living* of the human community. Hence, *under-development* is projected as a state created by *absence of modern western science and technological system*. The *technological transformation* is always justified as ‘*improvement*’ and ‘*increase in economic value*’.

4.3.4.2 Step II: Critique of the Mainstream Position

The alternative perspectives have developed a thorough and multi-faceted critique of Modern-Western science and Modern-Western technology as well as of their contribution to the processes of modernisation and industrialization.

Arrogant and Incorrect
Monistic Assertions

The monistic assertions that the science is ‘unique’ and ‘true’ are not only challenged on epistemological and empirical basis, but also found to be intellectually arrogant.

Control on
Development of
Science & Technology

The claim that the science and technology are self-determined in their structure and evolution is found to be vacuous. Science and technology are found to be shaped by and serve the priorities of whomsoever control their development.

Scrutiny of 'Non-Pure'
Science & Technology

Because the genesis and application of the science and technology are controlled primarily by certain sections in human societies, there is nothing 'pure' or 'pristine' about them.

And because they are under the control of certain sections of human societies, the genesis and application of the science and technology should be put under scrutiny of human societies, with a wider participation of different sections of society.

Arrogance towards
Nature

According to alternative perspective, ecological destructiveness of modern technology is rooted in its arrogant and manipulative approach toward nature.

Further, the alternative perspective argues that modern technology creates new scarcities through ecological destruction (for example, reduction in availability of fertile land, in genetic and crop diversity, and in ecological vulnerability due to monoculture).

According to alternative perspectives, ecologically (and economically) inappropriate science and technology contribute to underdevelopment through destruction of eco-systems.

The alternative position believes that the central tenet of technological worship that progress must continue at all costs is in direct contradiction to the laws of nature. In nature's eco-system, equilibrium prevails.

It is also maintained that the complex technology has diverged from basic processes of life and proved destructive to nature.

Ecological Destruction

According to the critics, industrialization (based on modern technology) is inherently resource-intensive, resource wasting, and exploitative of natural resources.

Instead of being politically neutral, according to the alternative position, modern technology is politically centralizing and repressive. It renders communities and people politically vulnerable due to the dependence it breeds on external inputs controlled by dominant sections. Ever-greater centralization of authority leads to a steady diminution of personal freedoms.

Technological processes create demands for raw materials and markets, and control over both becomes an essential part of the politics of technological change.

In periods of rapid technological transformation it is assumed that society and people must adjust instead of technical change adjusting to social values such as social equity, environmental sustainability and political participation.

Implications of
Techno-Supramacism

It also argues that there is absence of criteria for evaluating science and technological systems in terms of resource use efficiency and capability for basic needs satisfaction.

Anti-Women	<p>The eco-feminist perspective argues that science, technology, and development are not the universal categories of progress, but the special projects of modern western patriarchy aimed at subjugation of women and nature.</p>
Anti-Labor	<p>The alternative position also argues that modern technology, being capital-intensive and labor displacing, destroys employment potential of economic activities.</p>
False Efficiency	<p>It is claimed that modern technology creates a false impression of economic efficiency by externalizing some costs while making others invisible.</p>
Health Hazards	<p>It is argued that the chemical and nuclear technologies attack the very substance of life. The factories are dangerous places to work and industrial accidents are common. Industrial society is suffering from a virtual epidemic of cancers and immune system disorder.</p>
Socially Regressive	<p>The radicals dispute the claim that modern technology is socially progressive and liberating because of its inherent push for modernization of traditional communities. For them, modern technology is socially regressive as it destroys supportive, kinship-based, familial social relationships in the pre-industrial communities and replaces them with the rigid social hierarchies.</p> <p>It is claimed also that social stress and tensions emerging from feeling of being dispossessed constitute a breeding ground for violence.</p>
Dehumanizing & Alienating	<p>The alternative perspective criticizes modern technology and machine driven production system as dehumanizing. It argues that modern technology involves repetitive, brain destroying, mind-numbing, unnatural, and alienating tasks opposed to organic, life-affirming work in [pre-industrial] craft and guild system.</p> <p>Immersed in the industrial processes, workers begin to employ mechanistic metaphors for society and nature, thus contaminating and dehumanizing their world-views as well. It is stated that increasingly people come to separate their long hours of drudgery from their ‘real’ lives.</p>
Lack of Cognitive Connection	<p>It points out that the lack of the theoretical cognition of the two ends of technological process – its beginning in natural resources and its end in basic human needs – has created the current misplaced emphasis of technological development.</p>

The alternative perspective maintains that current economic and technological development results in shattering of traditional rural industries. It marginalizes and dispossesses increasing numbers from productive capacity.

Economic Inequity

It is further argued that there is always unequal access to new technology as it is associated with high capital and energy intensiveness. Modern technology, it is maintained, tends to magnify inequalities between and within countries.

The mainstream stand in favor of technological transformation as ‘improvement’ and ‘increase in economic value’ has also been challenged. It is claimed that the terms like improvement and value are not neutral. They are contextual and value-laden. What is value added from one perspective is value lost from another. Therefore generalized usage of these terms could be misleading.

Value-Orientation

Thus, the modern scientific project is held to be a ***universalizing project of reduction, fragmentation and violent control***. The scientific view is denounced not only as progenitor of harmful technology; it is also implicated in the ***intellectual rift that has torn humanity away from nature***. The science is also disparaged for its emphasis on specialization. It argues that the specialist is but a cog in a death-dealing mega machine utterly disengaged from the oneness of humanity and nature.

4.3.4.3 Step III: Alternatives to the Mainstream Component

In formulating an alternative to existing technological system, many radicals advocate ‘soft’, ‘intermediate’ and ‘appropriate’ technologies because they are more environmentally benign and also because they are potentially democratic. That is, unlike high technology, they can be owned, understood, maintained and used by individuals and groups with little economic and political power. It is claimed that appropriate technologies are small in scale, emit little pollution, and do not require extensive consumption of natural resources.

Appropriate
Technology

Some radicals praise pre-capitalist technological system for its non-domineering nature and because it allowed people to live in sustainable community without impairing the viability of eco-systems. This belief is predicated on the assumption that only in a primal setting can a fully human existence be realized, as primal people lived in close harmony with nature. Even in the comparatively recent times, rural people with simple technology, it is said, offer a model of environmental stability and social sanctity.

Return to Pre-industrial
System

There is also a longing for pre-industrial world of craft production and guild systems among some eco-radicals. The craft system is regarded as both socially and economically superior to technology-oriented mass-production.

The alternative suggested to the present technological system based on overuse of finite natural resources is the use renewable resources for energy as well as for materials. The renewable resources for energy typically include, biomass, combination of solar power and wind power and energy conservation. It is claimed that use of renewable resources could only make for healthier environment.

4.3.4.4 Step IV: Critique of the Alternatives

The critics of these alternatives to Modern-Western science and technology often dismiss these alternatives as non-serious, insignificant, amateur attempts. However, they give serious consideration to the various criticisms of the Modern-Western science and technology and provide their counter-arguments. Here, in these sub-section, we begin with the criticism of the alternatives suggested and then present their counter arguments to the criticisms of the Modern-Western science and technology.

In the case of ‘appropriate’ technologies, the critics point out that many ‘soft’ technologies are very ‘expensive’ and require high capital or upfront costs. As an example, they point at the solar photovoltaic technology or wind machines. On the other hand, many ‘cheap,’ ‘small-scale,’ and ‘intermediate’ technologies are very low in efficiency, reliability, and performance standards. They claim that the only technologies that are efficient, reliable, and cost effective at the same time are the mainstream technologies.

It is also stated that purely economic view of appropriateness (i.e. appropriate in relation to capital and labour endowments) is a narrow, restricted and one-dimensional view; environmental and social dimensions are also important and need to be considered.

Several criticisms are levied against the eco-radicals thesis of primal purity and also the alternative longing for the pre-industrial world of guild system. Critics claim that eco-radicals unrealistically view tribals as a single, unified category, and that they fail to distinguished among tribal groups, picturing them as undifferentiated ‘other’. It is also claimed that many tribal peoples are often highly destructive of nature, that their lives are more penurious than affluent.

The critics also claim that the postulate of primal purity is closely bound with the notion of the mature eco-system. However, the perfectly balanced climax eco-system is now seen as a (imaginary) reflection of social ideals rather than of nature’s actual workings. Therefore, it is argued that the radicals’ model of eco-system dynamics is itself seriously flawed.

Regarding the alternative longing for pre-industrial guild system, critics claim that the medieval guilds were not caring, familial institutions

but authoritarian organizations. It is further stated that the guild system was founded on an extraordinary inequitable distribution of resources. The critics further argue that the pre-industrial world was far from the economic and social paradise imagined by some eco-radicals. The health standards of most pre-industrial regimes were atrocious. They note that in fact the health standard has vastly improved since industrial revolution.

It is argued that many natural (i.e., renewable) substances actually proved to be far more ecologically destructive than their synthetic substitutes. (For example, wood as compared to coal as a energy source). It is also stated that non-biodegradable materials are on aggregate easier to recycle than are their biodegradable alternatives. It is claimed that, contrary to eco-radical doctrines, biodegradation itself, given our current waste-disposal system, can generate serious environmental contamination. The fear is expressed that large-scale biomass conservation would prove to be an ecological catastrophe. Critics claim that primary organic productivity of the planet is limited. The essential non-renewable resources (by contrast) may be tapped in extraordinary quantities without substantially detracting from living ecosystems.

As mentioned before, the supporters of the Modern-Western science and technology provide many counter-arguments to the criticisms levied against the Modern-Western science and technology. The following are some of the major counter-arguments.

- The supporters of the Modern-Western science and technology claim that the technological progress itself is a *positive sum game* in which winners far outnumber the losers.
- They claim that *economic and ecological health* is mutually *supportive*, not contradictory. As an example it is pointed out that, both effective conservation and commercialization of solar energy demands *highly sophisticated technology*.
- They recognize the environmental problems but believe that our current form of society will always solve them and achieve unlimited growth. It is also claimed that by *careful economic and environmental management*, environmental problems can be negotiated.
- They advocate the use of the potential of *free market allied to technology* to solve our environmental problems. Thus if a 'natural resource' is running out, its increased scarcity will push up the price of goods or services that come through that resource. This will encourage technologists to try to devise a substitute or more ingenious ways to providing the same goods.
- They claim that substituting capital for labor, if done intelligently, boosts productivity, creating a *larger pie for society* as a whole.
- It is also claimed that alternative economists misinterpret the relationship between automation and unemployment by clinging to an outdated vision of the former. *Increased*

productivity leads to economic expansion, with the result that extinguished jobs will be replaced, on aggregate, by ‘better’ paying jobs in other sectors.

- The proponents of the science and technology also point out that developing *clean production systems* will require *sustained technological advance* and tremendous *re-channeling of capital*. They claim that many contemporary technological innovations are lending themselves to increased *decentralization*, for example, electricity generation.

4.4 The Socio-Cultural Component

4.4.1 The Process of Urbanization

4.4.1.1 Step I: The Mainstream Position

Urbanization or *Urbanism* is one of the important characteristics of the capitalist development model. It is one of the major *distinguishing socio-cultural characteristics* of the ‘modern’ or ‘developed’ societies that separate them from the ‘pre-modern’ or ‘underdeveloped’ societies. The industrialization and urbanization are simultaneous processes. The growth of urban-industrial system and migration of large rural population into urban centers in search of employment has become a common feature of modern societies. The process of urbanization is characterized by the following major features.

Urbanization is claimed to *provide increased or higher standard of living* to the urban inhabitants, because of the concentration of people who could afford and want the higher standards.

Urbanization is also seen as *socially emancipatory*, especially for sections of societies, which are repressed in the pre-modern society such as women. This is because urbanization allows these section to escape the shackles of the traditional norms and institutions that are integral part of economic and social life in villages.

Finally, urbanization is seen as *creating conditions for more vigorous and diverse cultural activities*, again for the sheer reason of the high concentration of people who have interest and ability to participate in diverse cultural activities.

4.4.1.2 Step II: Critique of Urbanization

The following are various criticisms of the process of urbanization, which is said to be one of the major characteristic of the capitalist development model.

- The alternative position points out that urbanization is inherently *hierarchical* and *exploitative*. It argues that every city owes its existence to *hierarchical organization of space and trade*. The relationship between town and its hinterland is never horizontal; it is essentially hierarchical and exploitative especially because of the concentrated economic power in the city.
- Further, it is maintained that large cities are intrinsically *destructive of both nature and humanity*.
- Another criticism is that larger cities generate a *dehumanizing anonymity*.

- It points out that urbanization creates many *social problems* like crime, destitution, and alienation, as individuals are left at the mercy of capital and bureaucracies, without control over their lives, and without any substitute for earlier social and cultural support systems.

4.4.1.3 Step III: The Alternative of Rural Agrarian Society

In view of these criticisms, the radical proponents make the following suggestions for alternative, which together profess replacing the large urbanized conglomerates with the small rural agrarian communities.

- To overcome the present ills of the urban society, the alternative perspective talks about *limiting* or *forbidding future urban growth*.
- It is suggested that creation of *rural agrarian society* is essential.
- The reorganization of society on the basis of *small-scale communities* with direct, personal relationships, and face-to-face contact among citizens is proposed.
- Some advocate a return to *animal powered forms of cultivation* that shun all chemical inputs and require more human labour.

4.4.1.4 Step IV: Critique of the Rural Agrarian Society

The alternative to return to rural agrarian society has been challenged on many grounds.

- The critics claim that the nature of rural and small town life is *parochial* and *small-minded*.
- The rural societies prominently exhibit *conservative* and *elitist* tendencies.
- The city has been regarded as the scene of *individual liberation* rather than anonymous repression.
- The critics maintain that demolishing the framework of contemporary urbanism would be an attack on *human freedom* and *dignity*.
- They also argue that urban settlements are *ecologically* far *less stressful* and *energy efficient* ways of accommodating large numbers of people as compared to the rural way of existence. Therefore, they argue environmentally sound society should encourage growth of high-density urban centers.

4.5 The Political Component

In the political component, there are two major elements, which are debated in the development discourse, viz., (a) the role played by the institution of the state or more precisely by the capitalist state and (b) the governance (or administrative) organizations, which are large-scale, hierarchical, and centralizing.

4.5.1 The Role of the Capitalist State

4.5.1.1 Step I : Mainstream Position

The institution of state has acquired immense importance in modern political system because of the concentration of vast powers in state machinery. In capitalist state, the state is seen as responsible *for creating and maintaining conditions for* individuals and firms for *conducting unrestrained economic activity* as well as for law-abiding citizens to conduct their individual lives. This responsibility primarily includes the following three responsibilities. The state is expected to *create a legal and procedural frameworks* for conducting economic activities as well as that to *ensure adherence to these rules*. Second, the state is often expected to *provide public goods*, which the private firms in the society cannot provide simply due to the peculiar nature of these goods. This includes creation and maintenance of physical and social infrastructure. Third, the state is also expected to *conduct welfare activities* for the disadvantaged sections of society. For carrying out these responsibilities, the state is expected to *collect taxes*. The state is expected to carry out all these functions, *without interfering the free play of the market*.

4.5.1.2 Step II: The Critique of the Mainstream Position

There is considerable diversity in the alternative criticisms of the capitalist state and the different roles taken up by or assigned to. Some of the major criticisms are as follows.

- Due to its *size* and *monolithic structure*, the modern state has an inherent tendency to *neglect* critical political issues such as *participation* and *equity*.
- The state as the builder of national consensus tends to *suppress regional and ethnic identities*, which results in effective marginalization of the regions and sections, which differ from the dominant sections, and regions.
- The rise of the modern state led to *reliance on the state* as the prime source of solutions and succor instead of the mutual social (family and community based) obligations in the previous set-up. Apart from weakening the social fabric and making individuals vulnerable, this shift also created a tendency, on the part of the people and their leaders, to look for solutions to all social problems in the power or control over the state.
- The democratic state in the capitalist society has been acting as a *collaborator (comprador)* helping the process of *capitalist accumulation* to the benefit of political and economic elite.

4.5.1.3 Step III: The Alternatives to the Capitalist State : Anarchist Communities

One set of criticism against the character of present state institution came from the Marxist thought. It suggested the alternative in the form of *socialist state*. We have already discussed the distinctive factor of the socialist state—viz., the central economic role assigned to it—earlier in this section. Therefore, we are concentrating here on the alternative of *anarchist communities*. The alternative of anarchism has been shared by different thinkers representing different ideological streams, which include, environmentalists, feminists, liberals, and Gandhians.

The doctrine of Anarchism advocates *absolute freedom* for individuals. It rejects any higher form of rule, authority, or government than that which proceeds directly from the governed themselves (i.e., *self government*). Anarchists are strongly opposed to the *state* in any form, believing that it *should be abolished* immediately and completely.

While some anarchists think that the state has an independent existence and life of its own, others accept the Marxist view of it as the indispensable agent of capital. It holds that state action means compulsory *destruction of moral values* because instead of trusting individual to do right things, state distrusts him and threatens him with punishment.

Anarchist perspective holds that *decentralization, local democracy, and human-scale institutions* maximize opportunities for cooperative self-management. Anarchism contends that there are viable alternatives forms of *voluntary organization* that can substitute government. Removing *hierarchy* becomes cornerstone of anarchism. Anarchism upholds *mutual aid* and *co-operation* rather than competition. *Direct democracy* at the community level is considered to be essential to the anarchist goals of *personal and community empowerment* and *self-management*. The complete *devolution of power* is also seen to liberate what is believed to be a natural human instinct for cooperation as well as make possible self-sufficient and ecologically harmonious local economies.

Communes and *neighborhood groups* are the favored anarchist units of social organization. The Anarchism believes that the dismantling of the state would lead to spontaneous cooperation and the strengthening of social bonds between people. Anti social behavior would be dealt with via community censure rather than via abstract and inflexible legal rules laid down by remote nation state. The anarchist assumption that humans are *naturally cooperative*, but are presently corrupted by hierarchical institutions, also stands in contrast to the classical liberal view, which saw humans as naturally self-seeking and in need of restraint.

4.5.1.4 Step IV: The Critique of Anarchist Communities

The alternative to the state in the form of the Anarchist Communities has engendered diverse criticisms, as described below.

- The critics of anarchism claim that the destruction of the state will result in a *chaotic situation* where strong will dominate the weak.
- With the destruction of state institution, it is apprehended, the human societies will go back to the state of primitive communities.
- The critics argue that state cannot directly promote or enforce morality but it can create external conditions so as to make it possible for the individual to live the moral life.
- Critics point out that the Anarchists treat *liberty* as the greatest value and treat *authority* as the destruction of liberty, but it is claimed that these two are not always opposite to each other; they could be *complementary* and *supplementary* to each other.
- It is claimed that this approach makes sense only when the local people possess an appropriate *social* and *ecological consciousness*.

- The rejection of a vertical model of representative democracy in favor of horizontal model of direct democracy underrates the innovative potential of '*cosmopolitan urban center*' vis-à-vis the '*local rural periphery*'.
- Decentralization can also be *ecologically and socially problematic*. Insisting on decentralization can also compromise the eco-centric goal of *social justice*. This is because there will be no *effective central decision-making forum* that will be able to redistribute resources between regions or provide relief in times of disaster.
- The role of *voluntary associations* has also been challenged claiming that they are inadequate to handle the issues like police, defense, and enforcement of contract.

4.5.2 The Large-Scale, Centralizing, Hierarchical Governance Organizations

4.5.2.1 Step I : The Mainstream Position

Here, these governance organizations include the legislative and administrative organizations as well as the political parties. Considering the intricate nature and vast scope of the responsibilities that are shouldered by the capitalist state, it is expected that the governance organizations would become *large-scale* organizations, which are *complex, centralized, and hierarchical* in nature. They are not only considered inevitable but also important to run the system. *Bureaucratized structures* and *rule bound behavior* are important characteristics of these institutions.

4.5.2.2 Step II: The Critique of the Mainstream Position

The large-scale, centralizing, complex, hierarchical governance organizations invoke a diverse range of criticisms, which are briefly discussed here.

- The radical perspectives claim that large-scale political structures are *dehumanizing* in scale, destroying local communities economically and socially.
- The giant organizations are deadly to nature as they lead to *environmental degradation* and *social waste*.
- The large-size and complex governance organizations are burdens on society as they require *immense resources* to sustain them and that many 'poor' countries cannot afford them.
- Further it is claimed that the large scale and complexity of the governance organizations make political interactions among its constituents *devoid of personal relationships*, and *alienated* from the lives of people.
- Such organizations are seen to submerge *individualism* and *self-determination*, and to further the domineering interests of financial and political elites.
- As a result of centralization, there is *lack of autonomy* and *lack of opportunity* to participate effectively.
- Further, these organizations encroach upon the political space of individuals by eliminating possibilities of dissent, while effectively *marginalizing* the political aspirations and demands of *smaller groups* and *minorities*.

- It is also pointed out that even in the so-called democratic societies, the *rights* of an individual are *curtailed* by the large organizations in many indirect and subtle ways.
- Large-scale organizations are also extremely *hierarchical*. In hierarchical structures, power and control is exerted by some people over others. This is regarded as the basis of all the *repressive institutions* of advanced societies. The hierarchical character of the political structures, according to the radical criticisms, entails a *desire to control*, resulting in the misuse of political power, which, in turn, breeds corruption, nepotism, repression, and violence.

4.5.2.3 Step III: The Alternatives Suggested : Decentralization and Participation

The radical prescriptions regarding the restructuring of the governance organizations are largely based on the theme of *participatory democracy* at the community level. The assumption is that when all people have *equal and direct political power*, society will be free of any domination. To handle the problem of hierarchy in political organizations, the radical perspective prescribes restructuring of political organizations based mainly on *horizontal solidarity* rather than vertical control. This requires that the size of the organization be restricted to the scale not larger than that at which *direct person-to-person contact* cannot be maintained.

Alternative perspective maintains that *decentralisation* of decision-making authority will ensure the existence of true democratic system. It holds that *non-hierarchical, democratic, decentralized* structures would result in *full diffusion of power*. In such situation, a domineering elite could never arise.

4.5.2.4 Step IV: The Critique of Decentralization and Participation

The alternative formulation in the form of decentralisation and participatory democracy has been criticized on several grounds.

- The critics claim that decentralisation tends to reflect the immediate economic interests of *powerful regional elites* rather than national priorities.
- They claim that there is a danger in total dismantling of centralizing structures. *Balance of power* among local, intermediate and central levels of authority is necessary.
- They also argue that small-scale participatory development does not guaranty elimination of *social oppression*.
- They also point out that direct development offers no guaranty of *ethical social norms*.

Section 5: Formulating the Sustainable Livelihoods Perspective

5.1 Introduction

5.1.1 Four Stages in Envisioning of the Perspective

The task of formulating an alternative development perspective is not only ambitious, it is mammoth. In order to bring it into the realm of possibility for the team, we divided the task of formulating a development perspective in three stages, viz., the Utopia, the Ideal Stage, and the Transition Stage. As the term suggests, Utopia indicates the 'dream-stage'. It is not an intention here to belittle it or use it in a derogative manner. It would be difficult for many to function or to exert themselves without having a dream before them. But the dreams need to be tempered with the demands of the reality.

So, we consider the second stage in envisioning a perspective, in order to see what ideals could be achieved by working on the given reality over a period. This stage could be called the 'Ideal Stage', which will articulate the realistic vision about the end-result of our development efforts. In a sense, it is still a dream but a more realistic dream.

Many efforts for envisioning stop at this stage. However, in order to be practical and see that the vision in the Ideal stage is brought into being, we need to have a plan for transition from the current reality to the ideal stage. This brings into focus the third stage, which is called the Transition Stage. It is a crucial state for us, because, in order to be useful for the practical purposes, the process of envisioning the alternative development perspective needs to focus on this third stage. Hence, this effort to formulate an alternative development perspective is entirely focused on this Transition Stage.

5.1.2 Practical Considerations

Because this effort is focused on the Transition Stage, it has to pay attention to some key practical considerations. First, the critiques of the capitalist mainstream model of development, especially from the radical environmentalist and feminist perspectives, often heavily criticize the contribution of modernity in general and modern science and technology in particular. While considering these critiques seriously, we need to pay due attention to the positive contribution of the modernity to social and cultural spheres of human civilizations. It has been pointed out by many that values such as social equity and political freedom are the gifts of modernity, which engendered the new thinking like feminist thinking.

Second, we will have to also consider the benefits of modern science and technology being enjoyed by a section of society and being aspired by other sections of society, especially by the young generation from these sections. It is also important to understand and acknowledge the impact of the rhetoric of growth and prosperity on the minds of the young generation from across the society. This does not mean, however, to give up what is desirable and stick only to what is practical. It certainly means not taking very extreme and adamant positions on certain issues and work patiently and in steps to bring about what is desirable.

Often, such an approach is dismissed as reformist and hence useless to achieve anything essentially different from the mainstream goal, because most of the reformist attempts are usually appropriated by the mainstream in due course of time. One

distinguishing test could be used to avoid this eminently possible danger of appropriation. There is no harm in taking an incremental step as long as it creates opportunity for the next incremental step, and not the vested interest in retracting to the previous step. This test needs to be kept in mind during our efforts to evolve an alternative perspective.

5.2 The Building Blocks

5.2.1 The Foundational Values

If we study the radical discourse on development and environment, we come across serious and in-depth discussion on a diverse set of values on which the different radical schools are based and draw inspiration from. The more common ethical values would include: Social Justice, Political Freedom and Equity, Primacy to Basic Needs Satisfaction, Ecological Responsibility, Respect for Nature, Solidarity, Cultural diversity, Non-violence, Truth, Self-reliance, Feminine Principle (relationship of woman to nature which is tender and nurturing), Principle of Cooperation, Sustainability. In addition, the ultra radical environmental groups also profess ethical values like: Biospherical Egalitarianism, Principle of Diversity and Symbiosis, Complexity not Complication, and Local Autonomy and Decentralization.

In order to provide the right direction to our efforts of formulating an alternative development perspective, we need to start from making the ethical foundations of the proposed perspective explicit and elaborate. These foundational values of our proposed perspective need not be invented fresh. They have been guiding human civilization from ages. The values on which edifice of our alternative perspective needs to be built on are: Truth, Non-violence and Peace, Equity and Justice, Freedom and Political Transparency, Solidarity and Mutuality (with nature and other human beings), Self-Reliance and Simplicity, and Cultural Diversity.

5.2.2 The Objectives Guiding the Perspective

As we have seen earlier, the main and sole objective of the mainstream perspective has been the macro-economic growth. In this effort of formulating an alternative development perspective, we need to begin by clearly defining our objectives, in view of the prevailing situation in the countries like India, the critique of the mainstream position, and the foundational values that has been accepted. It is the proposal of the Resources and Livelihoods Group of Prayas that the objective of providing security of sustainable livelihoods should be treated as the first priority objective of development thinking and practice.

Here, the term 'livelihoods' does not imply only the 'basic needs' as often misinterpreted. It includes everything that is needed to lead a dignified human life for individuals and families. In economic terms, it certainly includes the nutritious food, clean drinking water, all-weather shelter, proper and adequate primary health-care, and primary education for all children. This addresses the dimension of sufficiency of livelihoods. However, the objective adds the dimension of security, which is often forgotten even by some radical thinkers. The families from disadvantaged sections often face difficulties that come in two forms: the chronic stresses (e.g., protracted illnesses) and sudden shocks (e.g., floods, earthquake, invasions, or project-induced displacement), both are equally devastating

for the livelihoods of families. Because of the disadvantages and deprivations suffered by disadvantaged families, the frequency of such shocks and stresses is considerably high and their impacts are more grave and deep for these families. As a result, these families take longer time to recover and many fail to recover and go down the steep path of disintegration and other tragedies. In order to avoid such impact, the family should be able to build capabilities and should have access to adequate resources, stores, and assets that will help them to overcome these shocks and stresses. This is the way to build security of livelihoods of families. So the primary objective of development should include not only the sufficiency dimension but also the security dimension of the livelihoods.

The security of livelihoods is a crucial component as it is expected to allow the disadvantaged families to break out of the vicious cycle of dependence and deprivation. In other words, it is expected to help these families have adequate economic strength and psychological respite to demand political autonomy, equal social status, and space for maintaining cultural diversity. The economic strength and psychological respite would also prompt the families to aspire for higher level of economic prosperity and seek fulfillment in other dimensions of life, and, hence, to think and work for investing for future in diverse manners.

There is no need to mention that the efforts to acquire sufficiency and security of livelihoods should be done with the sustainability of environment in mind. More precisely, because the livelihoods of disadvantaged sections of society in rural areas and in urban fringes heavily rely on surrounding natural resources, integrity and sustainability of these resources is an integral part of the objective of secured livelihoods for these sections.

Thus, the objective of livelihoods security includes livelihoods sufficiency, livelihoods security, equality and security of social status, psychological health, opportunity of maintaining cultural diversity, and adequate political autonomy to express opinions and exercise democratic rights. It also opens the doors for better future. To include the crucial dimension of environmental sustainability, the term sustainable is sometime added to the term secured livelihoods. Alternatively, security is interpreted as social sustainability and a simpler term of 'sustainable livelihoods' is used to indicate both security and environmental sustainability.

Though the security of sustainable livelihoods is the first and priority objective, it need not be the final and ultimate objective of the development efforts. The final objective could be to provide opportunities to all to lead lives with a balance mix of economic prosperity, psychological health, social equality, political autonomy, cultural diversity for the individuals and communities. It should be fulfilled in the environmentally sustainable manner. The final objective could be further elaborated by communities and thinkers together, based on certain value frameworks.

Though the perspective does not believe that development efforts should stop at the first step of providing sustainable and secured livelihoods, to impress upon the urgency and the crucial nature of the sustainability and security of livelihoods, the perspective is named here as the Sustainable Livelihoods Perspective.

5.2.3 The Public Control and Public Interest

In this subsection, we introduce two concepts, which will be used in formulating the SL Perspective. In the context of the foundational values and that of the critique of capitalist model, some tempering or control on the activities of the advantaged sections of society will be necessary in order to fulfill the objectives mentioned above. The first concept, viz., the concept of ‘Public Control’ articulates the nature of this control and the other concept, viz., the concept of the ‘Public Interest’ articulates the criteria or rationale for this control. This is necessary in order to clarify the position of the SLP on the issue of social control, which is equated often with the state control, which became an end in itself.

Here, Public Control is defined as the control of people on the affairs of society, to be more precise on the affairs that are not strictly private to the individual and have implications for other members of the society. The state control is sometimes seen as an instrument for the public control. However, this instrument often becomes an end in itself and turns out to be problematic for various reasons and ends up becoming a ‘cause-celebre’. Hence, by using the term ‘public;’ we want to emphasize here on the fundamental agency, viz., public, which should have to control. Moreover, the term ‘public’ is also used here—as against the term social or people’s control—in order to emphasize on the nature of affairs (i.e., ‘public’) to be controlled and to avoid restricting it to the usual ‘social’ sphere only.

The term ‘Public Interest’ is defined here as the sum total of interests of the disadvantaged sections of society as well as interests of society as a whole, especially the broader and long-term interests of society, including social equity, political autonomy, and environmental sustainability. Thus, the protection and promotion of the ‘Public Interest’ becomes the main rational for exercising ‘Public Control.’

In practice, the Public Control could be exercised through the state apparatus and representative democracy using different measure. However, in the current situation, both these instruments have lost their efficacy as well as credibility to act as the instruments for public control. This does not mean abandonment of the state instrument or the representative democracy, but to accept their limitations and accept the need to find ways to make them effective. In this context, need for evolving new mechanisms for direct democracy is urgent. Such mechanism should allow the members of the public and their organizations to exercise control on public affairs, without any mediator (as in the case of the representative democracy). One such example could be the institutions, which will have structures and functioning similar to the new Electricity Regulatory Commissions established in the country. However, the main underlying objective of these commissions is to protect the private investors from vagaries of the state. And, as a result, they are not ‘public-oriented’ or ‘public-friendly’ and often turn technocratic, bureaucratic, and legalistic. There could be ways in which these could be converted into Public Regulatory Commissions, which could become instruments for exercising public control. They could be given adequate powers and guarded against any undue influences or excess through a variety of checks and balances.

5.3 The Economic Component of the SLP

Now, having these initial elements in place, we should move to the substantive aspects of the SLP. As mentioned before, the substantive content of the development debate

is divided in this framework in four components. In this subsection, we begin with the Economic component, which has been the most debated component.

5.3.1 The Two Mechanisms for Protecting Disadvantaged

Before getting into formulations of various economic elements in the SLP, let us first discuss two crucial economic measures required to protect disadvantaged sections in an economy on which they have very little or negligible control.

5.3.1.1 Three Spheres or Tracks of the Economy

In the light of the clear and heavy emphasis on the objective of providing livelihoods security to the disadvantaged, it is proposed that we also consider to carve out a space within economy wherein the realization of this priority objective could be attempted freely, while avoiding the backlash from a broad front of powerful sections who would be affected, if we try to reorient the entire economy to suit this objective. This will have to be seen as a political compromise in the Transition Stage.

This carved out space could be envisaged as made of two spheres within the larger economy, which could be called the 'Basic Amenities Sphere' and the 'Livelihoods Sphere'. As the first name suggests, the operations of the first sphere would be primarily geared to achievement of the sole objective of provision of basic amenities, which would include not only food, water, and shelter, but would also include other basic amenities such as nutrition, sanitation, primary health-care, and primary education. Considering the fact that a really large number of people in this country are yet to get these basic amenities, creation of a separate sphere for this is essential.

Beyond these minimum basic amenities, providing for fulfilling the priority objective of secured and adequate livelihoods would be the objective guiding the operations of the second sphere of the economy, viz., the Livelihoods Sphere. This objective means achievement of a state at which the families would be able to make independent decisions about their present and future. What is required to achieve this state is far greater than what is required for provision of basic amenities for survival.

The rest of the economy could be termed as the 'Prosperity' or 'Luxury Sphere'. This third sphere could be allowed to work on the principles of full competition and open market, as long as it does not encroach upon the Public Interest or on the operations of the first two spheres.

Thus, the nature, structure, and rules of operation for each of these spheres will be different. While the first will work on the principles of the social justice and equity, the second will work according to the economic principle of 'Cost Plus,' i.e., paying full costs of provision plus a decent profit. The third will work on the principles of the capitalist economy such as free market and unfettered competition.

The division of economy into such spheres is not an entirely new idea. Hence, there could be legitimate apprehension that these would effectively mean interference in the economy and would prove disastrous, as was the case with earlier interventions. However, we could minimize the deleterious effects on economic operations by avoiding the restrictive measures (such as reservation, quota, license). Instead, we can opt for measures that will put

minimum restrictions on the operation of economy as a whole, while allowing competition and market mechanism within these minimum restrictions. This scheme will be based on the principles such as capping the profits and providing incentives under this cap for cost reduction. These ideas need to be developed further.

5.3.1.2 Protective Cover for Disadvantaged

The disadvantages suffered by the poor or vulnerable (or disadvantaged) sections of society in the capitalist system are too well-known to repeat here. However, at the same time, the socialist alternative of the state control (which was applied in the countries like India under the mix-economy model) has not worked out well for various reasons. It has created equally serious problems for the economy as a whole, without significantly helping the poor and disadvantaged. These factors have strengthened the current broad scale support to the policies of liberalization, privatization, and globalization (LPG), which would work against any attempt to bring back the state controls or even against implementing the Public Control measures, which are discussed above. While thinking about providing some protection to the disadvantaged sections of society, we need to make note of this background.

We can address this issue of protective cover through a two-pronged strategy. One prong of the strategy involves separation of the entire economy in the three parallel tracks or three connected spheres, which we have discussed earlier. This will provide different types of protections to the consumers and producers from disadvantaged sections, which would operate in the first two spheres of economy.

The other prong of the strategy is provision of innovative and special Measures for Protective Cover for the consumers and producers from the disadvantaged sections of society. These measures for ensuring positive discrimination or affirmative action in favor of the disadvantaged consumers and producers are specifically aimed at providing different types of cushions and fallback arrangements. One example is a limited measure of providing the purchasing support to the needy to participate even in the Basic Needs Spheres. Through this measure, we can help certain consumers, for example, for buying certain types of cloth up to a certain limit. At the same time, we will have to take some basic precautionary measures such as ensuring that adequate supply of those types of cloths is available in all regions for buying at the subsidized (or Basic Need) price. The other example could be restructuring and reinvigorating the current Public Distribution System by enforcing strict Public Control measures, especially by ensuring the control of the local community.

Coming to the small producers from disadvantaged sections, for them, participating in the market involves risk, which could be reduced by creating new innovative protecting measures like Community Market-Insurance Fund to spread out the risk over regions, crops, and time. These are just illustrative examples of the Protective Cover Measures.

5.3.2 Shaping the Major Economic Elements

5.3.2.1 The Self-Interest

In the Ideal stage, we can assume that human beings will be able to sublimate their self-interest and work for the broader interest. In order to achieve this stage, while working in the Transition Stage, we can create measures that will induce changes in the mind-set of the majority of human beings. We will also have to work to evolve socio-cultural and economic

conditions, which will create confidence in human minds that this sublimation will not be grossly disadvantages to her or him.

But in the Transition Stage, we will have to provide due space for the self-interest. However, the care should be taken that this exercise of self-interest will not harm the public interest. To do so, we will have to maintain public control (the state as well as the community) on this exercise. In order to ensure that this incremental step is not reformist, we need to create proper incentives—both economic and other—for the behavior in which self-interest is sublimated. These public control measures could be in various forms and at various levels, depending upon the nature and scope of the activity to be controlled. For example, for local-level economic operations, the public control should be primarily exercised through community-based instruments, while for the state-level institutions in the electricity sector, the public control mechanisms could be the state-level public regulatory commissions.

5.3.2.2 Market

There is overwhelming experience of the negative impact of the market. We also have considerable experience of socialist planning which was developed as an alternative to market. We need to shape our alternative to market in this background.

As its critics say, considering the negative social and environmental impacts of the market, the market is not an efficient mechanism as it claimed. However, it is a useful and workable mechanism for deciding the balance of demand and supply of a commodity or for making allocation decisions at the firm or commodity level. At least, there is no better mechanism for this purpose at the level of commodity and firm. So we will have to allow space for operations of market in all the three spheres of economy, only under different regulatory regimes. Moreover, the market activities at the firm level could be put under public control through various measures as described earlier.

Further, market is certainly not an ‘objective’ mechanism, as, by very nature, it favors those who have purchasing power and sides with their choices. This is because the only connection of the actor with market mechanism is its purchasing power. Thus, the level of its participation in the market and level of its influence on the market and hence its ability to express its choices is dependent only on the purchasing power it possesses. This affects the disadvantaged, who have very little purchasing power but want to participate in the market to get the goods and services for livelihoods.

One way to overcome this disadvantage is to replace the market altogether by planning or put severe control on it through the state apparatus. We have seen that our experience in the second half of the last century clearly demonstrates that this particular format in which these strategies were implemented did not work. Further, there is overwhelming onslaught of pro-market thinking, rhetoric, and policies all over the globe. This makes it very difficult, in the immediate transition stage, to bring back to the remedy of the state control or even to impose severe public control on market operations.

In this situation, the broad principle, which could be applicable in the transition stage, could be summed up in terms of the following three principles:

- Market as the mechanisms to decide the price (and hence indicate /decide the balance of demand and supply), and not as the objective and efficient mechanism to be allowed to have free run
- ‘Public Control’ (as discussed previously) on the market to avoid negative social, political, and environmental impacts
- Providing ‘Protective Cover’ to disadvantaged consumers and producers to protect themselves from the inherent disadvantages they would face while participating in the market

5.3.2.3 Competition or Monopoly

While we have been experiencing in our country and in other countries like Soviet Russia, that the state monopoly breeds inefficiency, corruption, nepotism, non-performance. At the same time, in the immediate future, it is not possible to bring into being an alternative economy entirely based on ideas like interdependence and cooperation. There will have to be a sea change in people’s attitude and institutional structure before this would be possible.

Hence, in the transition stage, what we can aspire for is making best possible use of the good aspects of the competition (as the mechanism for ensuring good performance), while trying to avoid or limit its negative fallouts for the public interest at large. We could do this by allowing some limited competition in the first two spheres, with some upper limits to profit. In the third sphere, i.e., in the luxury sphere, while removing the restricting and controls on competition, care will be taken to ensure that it will not adversely affect the public interest or the first two spheres at all.

5.3.2.4 Private Property

We need to think about the institution of private property in two clear contexts: (i) the private ownership of assets, including natural and other basic resources (land, water, and energy) and (ii) private ownership of economic enterprises. We have seen that mere changes in ownership (from private to state ownership) does not resolve problems created by development model, nor does the private ownership automatically guarantee the efficiency in use of resources and assets. Even the community-owned assets are facing many problems as the community management systems have been severely eroded, if not destroyed, mainly due to changes and erosion in the underlying values, institutions, and socio-cultural conditions. In short, the problems cannot be solved by merely juggling with the ownership only.

In the transition stage, it will be difficult to completely and immediately reverse the trend already set in favor of the private ownership of assets and economic enterprises. What will be more possible and important is, on one hand, to bring in ‘Public Control’ on the activities of the owners of private enterprises. And, on the other hand, eliminate obtuse inequality in the access to and ownership of assets, especially the natural resources. It needs to be remembered that (preferably) community or group ownership, or rights of access to the minimum level of natural and other basic resources (land, water, energy) is a precondition for ensuring secured livelihoods to all in rural areas.

5.3.2.5 Exploitation of Labor

Under the pressure from LPG policies, there are pressures to change the so-called pro-labor laws in the countries like India. It needs to be acknowledged that, while some of the laws are excessively biased in favor of organized employees in some sectors, the laws are not adequate to provide basic level of protection for workers from the so-called unorganized sectors. So the balance should be established in favor of the principle of providing basic security (of job and of health) for all workers.

5.3.2.6 Large Enterprises

The issues of large enterprises have two dimensions in the current situation in the era of ascendance of LPG policies. The large enterprises owned by the state are being dismantled or sold to private owners, while the legal and other barriers to the development of large private integrated, monopolistic enterprises are being fast dismantled. Both these trends are severely flawed. There has to be increased regulation and oversight on the activities of private monopolies and, in fact, proactive legislation to discourage them. In order to prevent the large private enterprises from gaining monopolistic control on the sectors, the public-owned large enterprises need to be preserved. In order to avoid the perversions in their functioning, these enterprises should be made transparent, autonomous, and accountable and be brought under strict public oversight and control.

5.4 The Other Components of the SLP

5.4.1 The Epistemic Component

In the case of the Epistemic component, the first three elements—viz., the World View, View towards Nature, and Epistemological Premises—discussed in the earlier section are not considered here for two reasons. First, the members of the team felt that this involves a considerable level of philosophical investigation, which should not be done without active support from the experts in the subject. Second, it was thought that dealing with these three elements will not be urgently necessary while formulating the perspective for the Transition Stage, as all three of them are more philosophical in character.

5.4.1.2 Science and Technology for Sustainable Livelihoods

There is no point in denying the instrumental role of the modern-western science and technology to bring about the quantum improvement in productivity of production processes in the industrial and agricultural sector. There is equally no point in denying the need for enhancement in productivity of production processes for fulfilling the objective of secured and sustainable livelihoods. However, the criticisms and objections on the Modern-Western science and technology (S & T) are too serious to brush aside. These objections are not only about their impacts but also about the very nature of the science and technology. As a result, while there is a need to fundamentally rethink the issue, it cannot be done without tempering the zeal to correct all the wrong in one go.

Further, while aiming at fundamental rethinking of S & T, the practical reality need also to be considered. It is a well-known fact that S & T have become a very high-stake business. They are one of the engines of the LPG processes. Another barrier to the proposed rethinking is the immense goodwill Science and technology have managed to have in the

minds of common people. Most people including the members of the disadvantaged sections look up to S&T as means of emancipation. In fact, in countries like India, S & T have been deified. As a result, any attempt to interfere with S & T in negative manner will prompt severe backlash.

With all this in mind, we should move ahead in our effort to articulate our position on S & T. In our effort, we can dig our heels and declare some propositions as non-negotiable. They would include:

- S & T need not be equated with human progress, via economic development. In other words, progress includes many things other than economic development and economic development could be achieved without giving free rein to S & T.
- There are many ways to gain knowledge of the physical and social reality other than the so-called scientific methodology and, as a result, there could be and are many bodies of S & T that are as true as the body of knowledge known as the Modern Western S & T. Thus, there is nothing ‘unique’ or ‘true’ about the Modern-Western S & T.
- Similarly, there is nothing universal about the Modern-Western S & T, as there are many contextual aspects that are specific to the local physical and social realities.
- Further, as S & T are products of human societies, they inherently contain characteristic of human products, including the sociology, politics, and morality. In other words, there is nothing ‘pure’ or ‘pristine’ about them. And, hence, they must be subjected to the scrutiny of human societies for their social, political, and moral implications.

Similarly, there are certain criteria for development and use of science, which will have to be enforced, in view of the priority objective of livelihoods security to all.

- S & T should not be destructive of employment and should give top priority to promotion of gainful employment.
- S & T should not be destructive of environment; especially it should not have any impact on the natural resources in rural areas on which rural people are dependent for their livelihoods.
- S & T should promote enhancement in primary productivity of the natural resource system.
- S & T should not be destructive for the production opportunities in primary and secondary sectors that directly serve to fulfill the basic and other livelihoods needs of the disadvantaged.
- S & T should not exacerbate inequities—economic, social, and political—further.
- S & T that would directly contribute to the fulfillment of the objective of secured and sustainable livelihoods should be given very high priority in all respects and at all levels.

5.4.2 The Socio-Cultural Component

As the proponents of the mainstream position claim, urbanization does provide advantages for certain social, cultural, political, and even economic activities. It is also true

that the process of social emancipation is facilitated by urbanization. At the same time, urban centers are economically exploitative and end up creating political disadvantages to the adjoining rural areas. This results in strong bias in favor of urban centers in resource allocation and in the form of the state's support to enforce this iniquitous distribution of resources. Eventually, this results in destruction of the local natural resource system in the hinterlands of these urban centers and affects the livelihoods of people who are dependent on these resources.

Hence, in this situation, we cannot do away with the urban megalopolises overnight. But we can certainly take immediate measures even during the transition stage. These mainly include, for example, the following two measures:

- (a) The current severe bias in favor of fast urbanization and concomitant neglect of rural areas should be reversed forthwith and completely. The policy and political support to this bias should be exposed and eliminated.
- (b) Small towns and medium cities should be made sustainable and independent in diverse manner as much as possible. They should be redesigned to conserve resources (such as water), to use renewable resources (such as solar power) and to generate the biomass-based goods for their own consumption (e.g., vegetable gardens). These measures would reduce exploitation of their rural hinterlands. Further, the economies of small cities should be reoriented to serve and strengthen the local economies of rural hinterlands, instead of becoming parasites of the megalopolises or their conduits for exploitation of the rural areas.

5.4.3 The Political Component

5.4.3.1 The Institution of the State

As the supporters of the state claim, the state does perform certain important functions, which are conducive to the objective of livelihoods security at least in the transition stage. There is no alternative to the state that is immediately available when it comes to the provisioning of public goods, carrying out welfare activities, and maintaining law and order. At the same time, it is quite clear that the state has become a comprador (collaborator) to the proponents of the LPG policies (local or foreign big capital). It is also true that, after the LPG era began, it has turned increasingly immune to the popular or political pressures from public in general.

However, the known alternatives, viz., the socialist alternative of the centrality of the state as well as the anarchist alternative of doing away with the state are both equally infeasible. What is required is making the state more accountable and less powerful, and preventing the state apparatus from siding with the pro-LPG interests at the cost of the livelihoods of the disadvantaged. This could be achieved in various ways, some of which are briefly mentioned below:

- (a) One way for this is to rejuvenate the inbuilt accountability mechanisms in democratic governance systems, such as elections, to make the functionaries of the state more accountable.

- (b) Second, to force installation of new and innovative mechanisms and procedures that are more participatory and open to citizens and civil society institutions to monitor and scrutinize the actual functioning (not only the functionaries) of the state.
- (c) Third, promote various initiatives to devolve power and authority to the lower levels of the state apparatus and work to make them effective. This considerably increases accountability of the state apparatus to common people.

5.4.3.2 The Size and Nature of the Governance Structures

The criticism of the governance institutions that are large, complex, hierarchical, and centralized is more than justified. At the same time, at least in the transition stage, some functions, responsibilities will have to be kept in the hands of such institutions (such as the defense, management of nuclear facilities). But what we should work for is to devolve all those functions, which could be handled by small-scale, less complex, more horizontal organizations to such organizations. We need to ensure that these organizations work in more accountable and participatory manner.

5.5 The Major Strategic Principles

After formulating the positions on major elements of the components of the conceptual core of the SL perspective, we now move ahead to see how the SLP made up of this conceptual core could be realized in practice. In other words, what will be the strategic core of the development practice under the SL Perspective. We begin by articulating some guiding strategic principles.

5.5.1 Economic Principles

- (i) Neither macro-economic growth nor maximization of private profit but 'sustainable and secured livelihoods to all' as the first and the priority objective of the theory and practice of development. This makes protection, sustenance, and enhancement of livelihoods especially of the disadvantaged sections the top priority.
- (ii) Making livelihood-based development a priority rather than relying on trickle-down to achieve the objective of secured livelihoods.
- (iii) Not productionism or consumerism, but enhancement of productivity through application of appropriate scientific knowledge and technology in order to support the needs of livelihood security.
- (iv) Productivity enhancement while avoiding resource-destructive, waste-generating, and polluting techniques and technologies; in other words enhancing human productivity while preserving the natural productivity of eco-systems.
- (v) Preference to the community rights over commons resources. Community rights should involve assured access to natural resources that are necessary for livelihood security to all, and especially to the grassroots and socially disadvantaged sections on priority.
- (vi) Instead of centralized, energy-intensive industrialization based on non-renewable resources of energy and materials, priority is to be given to economic self-reliance

(not self-sufficiency) through ‘dispersed industrialization’ based primarily on biomass and renewable energy sources.

5.5.2 Epistemic Principles

- (i) Transformation of technology to serve the ecological, social, political, and cultural objectives set out by community rather than transforming (modernizing) communities to suit technological advancement.
- (ii) Instead of expertocracy, empowering people to participate in generation, dissemination, and application of knowledge directly in the service of sustainable livelihoods.

5.5.3 Socio-Cultural Principles

- (i) Centrality given to concerns, priorities, and aspirations of grassroots livelihood earners and especially those of women, as they are the major livelihood-earners in grassroots communities.
- (ii) Specific attention to ensuring participation of as well as ethnic and other minorities in the social and cultural affairs as well as developmental efforts.
- (iii) Viewing squalid hyper-urbanization in developing countries as an anomaly, rather than a necessary stage in the process of modernization.
- (iv) Instead of yearning for a homogenized world culture as a precondition for “development,” allowing alternative cultural foundations of communities without precluding possibilities of dissent and cultural change based on non-exploitative exchange with other communities.

5.5.4 Political Principles

- (v) Instead of large, centralized, hierarchical political and administrative structures, creation of flexible, decentralized, bottom-loaded structures in which community level decision-making is a predominant mode. Decision-making at community level will be appreciative of livelihood concerns and accessible to grassroots people.
- (vi) The state not as a protector of the international and national interests siphoning off natural resources owned by grassroots communities, but as a facilitator to achieve praxis of sustainable and empowered livelihoods.
- (vii) Not depoliticized development but a vigorously political process of arriving at a praxis of sustainable and empowered livelihoods.
- (viii) Active resistance to all sorts of direct and indirect violence, and vigorous initiatives for reinstating peace, freedom, and harmony as the fundamental political principles from community to international levels.

5.6 The Major Strategies for Transition

Based on the strategic principles presented in the earlier sub-section as illustration, some major strategies are presented in this sub-section again on illustrative basis. The

objective is to give to the reader some idea about how the transition could be achieved. The actual strategies will be more location specific and need to be tailored to the needs of local ecology and local society.

5.6.1 Economic/Production Strategies

The core strategy in this sphere is to enhance the scope and productivity of the present livelihood activities of the disadvantaged families and to initiate new, highly productive but environmentally sustainable livelihood activities. To achieve this objective, we need to concentrate on the gradual restructuring of the rural economy, which revolves around the following four main themes: (a) Augmented and sustainable biomass production, (b) Augmentation and equity in water resources, (c) Augmentation, self-reliance, and equity in energy, (d) Dispersed industrialization.

5.6.1.1 Augmented and Sustainable Biomass Production

The augmentation of biomass production in a sustainable manner is aimed at three objectives: a) ecosystem rehabilitation through sustainable methods, b) sustainable productivity increase in agriculture, and c) diversified and surplus biomass for industrial processing

The main reason for the severe ecological destruction in rural areas has been continuous and predatory extraction of natural resources from these areas prompted by the motive of commercial profits. Hence, the first task is to rehabilitate local ecosystems by rapid regeneration of the primary productivity (productivity achieved without any external resource inputs) of local ecosystems. To achieve this rapidly and without entering into the death-trap of chemical inputs, large amount of biomass as green manure will be required. A firm and priority allotment of resources for this biomass generation and total recycling of waste biomass will be the necessary initial steps. Considering the present sorry state of most of the rural ecosystems, at least in the initial stages, some external inputs will have to be used in a judicious and strategic manner to rapidly reestablish the primary productivity.

Secondly, the present activity of production of cereals, food grains, pulses, and oilseeds in dry as well as irrigated areas need to be restructured to make it sustainable, resource-efficient, and equitable. Especially, in the dry region, assurance of protective irrigation will make a considerable change in productivity and livelihood capabilities. This agricultural activity will be linked with the ecosystem rehabilitation through obligatory farm forestry in exchange of inputs for agriculture from public funds.

Finally, after ensuring livelihood security and ecosystem rehabilitation, the third and most important use of surplus biomass comes into picture. Through farm forestry on private and public lands, local associations of disadvantaged sections will be able to produce large quantity of biomass. Instead of competing for external inputs (based on fossil fuels and minerals) for industrial activity, these areas can move beyond livelihood security using this surplus biomass. The surplus biomass will be given to local artisans' association as raw material for their industrial activity.

5.6.1.2 Augmentation and Equity in Water Resources

The first constraint to this strategy in most rural areas is water availability. The tremendous potential of various engineering measures for water and soil conservation is now well accepted by the mainstream experts as well as by the state and central governments. In addition to these measures, many other techniques and measures need to be employed in order to augment water availability. They include: upgradation of present water resource facilities, large scale adoption of water saving techniques and measures, developing local water storage systems, replenishing groundwater storages, and efforts to extend service areas of present irrigation projects. In addition, if necessary and possible, exogenous water could be utilized especially in water starved areas.

While doing all this, care should be taken that there is no extraction of water out of the ecosystem directly or indirectly in the form of export of water-intensive crops and their products.

5.6.1.3 Augmentation, Self-reliance, and Equity in Energy

The present development approach plays down importance of the energy sources other than fossil fuels and completely negates their potential to contribute to restructuring of rural areas. Often non-conventional energy sources are summarily dismissed as unviable, expensive, unreliable, and insignificant. There is almost cut throat competition for the fossil fuels at national and international level causing rise in prices and wars over access to their deposits. In contrast, rural areas in this country are endowed with abundant and renewable solar energy and equally immense potential to convert solar energy into biomass storage. It is necessary to build on this availability and potential instead of relying on exogenous, expensive, polluting, non-renewable, and unreliable fossil-based sources of energy.

Another important theme for widespread dissemination of renewable energy sources is participation of direct users, i.e., local associations of disadvantaged sections (such as women, toilers, and artisans) in production of energy. Increased biomass production, to which women will have open access, will automatically solve the most critical energy problem—the problem of cooking fuel. Further, in order to make the new energy systems economically sustainable and to distribute their gains equally, some preconditions need to be set for providing public funding to energy users' groups. They include, (a) Users' participation in resource mobilization, demand management, and maintenance of equipment and systems, and (b) Participatory decision making and management involving all those who have stakes in the system. Payments against energy costs could also be made in the form of contribution to the biomass pools of these associations. It is also important to consciously monitor and maintain the balance in terms of energy as well as monetary values of goods and materials exported and imported across the borders of the eco-systems. This is necessary to ensure that benefits of these efforts are enjoyed by toilers within the eco-system.

5.6.1.4 Strategy of Dispersed Industrialization

For enrichment of livelihood, it is essential to evolve possibilities of creating economic surplus and converting it into goods and services that are desired by toilers and artisans. This approach envisages that dispersed industrialization would serve this purpose of creating economic surplus. Further, dispersed industrialization will also serve the purpose of

creating meaningful employment and, hence, stake in and control over economy for artisans and urban toilers.

The main institutional mechanism will be Artisans' Industrial Associations (AIAs). The artisans and urban toilers, through AIAs, will get access to local raw material and biomass produced by groups and associations of women and toilers, energy from renewable as well as conventional sources, other necessary external inputs, and training as well as infrastructural facilities including work place. AIAs will also act as organs to push forth their various demands like funding and necessary policy changes (for example, in technology research).

In this approach, the main objective of industrialization is to serve the objective of livelihood security. Hence, production activity is not aimed at supporting extravagant consumption of affluent outsiders. But, production is first aimed at creating adequate physical infrastructure and energy facilities that are necessary for biomass production as well as for satisfying other needs of toilers. Production also includes energy-saving and external-input saving materials that are necessary for satisfying the non-food needs of toilers.

5.6.2 Major Technological Strategies

The critical element in realizing economic surplus through biomass-based dispersed industrialization is alternative technologies. The main features of these alternative technologies will be utilization of various biomass products as the main raw material base and renewable energy as the main energy source. To make this strategy effective and efficient, the judicious and strategic use of non-biomass materials as well as the conventional sources of energy should also be made. This judicious and strategic use of conventional materials should be aimed at enhancing the strength and reliability of biomass based materials by multifold, while using minimal levels of conventional materials. Use of conventional energy sources in similar manner would be aimed at overcoming deficiencies in renewable energy systems such as low reliability in some months.

The augmentation of energy supply required by this approach could be achieved only through development of dispersed and small renewable energy sources including wind energy, small hydro, solar-thermal, photovoltaic, and biomass energy. Biomass based energy could be utilized through either direct burning or via chemical route (e.g., biogas). The approach will also integrate energy efficiency measures and cogeneration in the overall energy mix. Simultaneously, it will draw from the grid at cheaper rates during off-peak hours on bulk purchase basis. In order to overcome the seasonal and diurnal variations in the supply of energy from renewable sources and match them with complex patterns of local energy demand, various combined or hybrid systems as well as different storage system will be employed. The storage systems will include biomass storage, pumped storage using local water-bodies, and even new hot-oil and non-renewable energy sources. However, it must be noted that, in order to facilitate wide-spread dissemination of renewable energy and storage systems, some research and development efforts are necessary to optimize the alternative technologies utilizing local material and labor. The challenge for alternative energy technologies is that the energy values (in coal replacement units) of locally produced biomass and locally trapped renewable energy should be in excess of the total energy inputs required by activities like ecosystem rehabilitation, production for subsistence and surplus biomass, development of infrastructure, and dispersed industrialization.

5.6.3 Political Strategies

5.6.3.1 Political Activism for Securing Rights (and Access) to Livelihood Resources

At the time of independence, as the result of the legacy of the feudal and colonial past, the MVS in India had extremely limited rights over (and access to) the local natural resources such as land, water bodies, and forests. The privately-owned resources were in the hands of the social, economic, and political elite. The colonial masters who had appropriated community resources (such as forests and common lands) ravaged them and, after the independence, handed them over to the state, which again is dominated by the elite sections. Though there were government and non-government initiatives to transfer land to MVS (such as land reforms acts and the "*Bhoodan*" movement), most of the MVS population remained without rights or access to the main natural resources, especially land, in the post-independence period.

MVS in the rural areas largely depend on the surrounding natural resources for the satisfaction of their livelihood needs. Thus, the local natural resources are the livelihood means of MVS. The political component of the alternative strategy emphasizes political activism for securing rights over resources. A right over livelihood resources is the first step towards the objective of livelihood security. Without such rights, the MVS in the society always have to depend on the land holding section for employment, which gives birth to the vicious cycle of dependency and deprivation.

5.6.3.2 Political Activism for Gaining Control over Governance of Local Natural Resources

The control over local natural resources in the hands of local people, especially in the hands of MVS, is essential to ensure free and just use of these resources. Therefore the alternative strategy lays emphasize on political activism for establishing the control of people over governance of local natural resources. The control over the process of governance implies control over the process of decision-making, control over the process of implementation of the decisions taken, and the monitoring of both processes (i.e. to ensure that the decision is according to the rule). The effective functioning of such control mechanism requires appropriate institutional structure as well as the framework of law. It also requires the pressure from people to guarantee participation, accountability, and transparency in the governance of natural resources.

5.6.4 Social and Institutional Strategies

Building economic institutions and political organizations of disadvantaged sections on the basis of common economic and political interests and mainly at the level of community will be the main institutional strategy in this perspective. These local economic organizations will include groups and associations of landless laborers, women producers, artisans involved in processing work, and livelihoods barter group of small cultivators.

The next step in institutional strategy will be to build federations, alliances, and coalitions of these grassroots-level and local institutions. This will help increase the bargaining power of the disadvantaged members of the local organizations.

In order to increase efficacy and efficiency of the local organizations and their federations, efforts should be made to enhance their analytical, theoretical, and managerial capabilities.

Efforts will have also to be made to evolve new and innovative economic arrangements and economic relationships among these organizations of disadvantaged as well as between these organizations and the state agencies and large cooperative institutions. For example, the local organizations may seek funds for entire village by entering into a tripartite agreement with the state finance agency and organizations of the local advantages sections. The state finance agencies will provide soft loans to the advantaged sections, with the condition of assured access to local resources for the disadvantaged sections. Similarly, innovative arrangements could be developed for produce sharing among the disadvantaged sections or new mechanism for debt-repayment by these sections not in cash but in kind. In these arrangements, the core principles will be the principles of interdependence, equity, and cooperation, and the relationships will be based on concrete norms for performance.

Apart from these, certain other guidelines could also be mentioned. For example, they would include:

- Instead of large, centralized projects and programmers, priority and emphasis on decentralized and small scale projects, programs, and institutions
- Transparency, accountability, and participation in of the decentralized institutions.
- Special emphasis on protection and conservation of common property resources and sustainable use of these resources for livelihoods security on priority: Making the resource and institutional base of current livelihood activities stronger.

Bibliography

Braidotti, Rosi, Charkiewicz, Ewa, Hausler, Sabine, Wieringa, Saskia, *Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis*, Zed Books Limited, 1994

Dobson, Andrew, Gancher, David (eds), *The Green Reader: Essays Toward a Sustainable Society*, Mercury House Incorporated San Francisco California, 1991

Engel, J. Ronald, Engel, Joan Gibb, *Ethics of Environment and Development: Global Challenge International Response*, The University of Arizona Press, 1990

Guha, Ramachandra, (ed.), *Social Ecology*, Oxford University Press, 1994

Gorz, Andre, *Ecology as Politics*, Southend Press, Bosten, 1980

Harcourt, Wendy, (ed.) *Feminist Perspective on Sustainable Development*, Zed Books Limited, 1994

Kurien, C. T., *On Markets in Economic Theory and Policy*, Orient Longman Limited, 1993

Kurien, C. T., *Global Capitalism and The Indian Economy: Tracts for The Times / 6*, Orient Longman Limited, 1994

Lewis, Martin W., *Green Delusions: An Environmentalist Critique of Radical Environmentalism*, Duke University Press, 1992

Mellor, Mary, *Breaking the Boundaries: Towards a Feminist Green Socialism*, Virago Press, London, 1992

Macy, Joanna, *Dharma and Development: Religion as Resource in the Sarvodaya Self-Help Movement*, Kumarian Press, 1929

Norgaard, Richard B., *Development Betrayed: The End of Progress and a Coevolutionary Revisioning of the Future*, Routledge, 1994

Omvedt, Gail, *Cultural Revolt in a Colonial Society: The NonBrahman Movement in western India 1873 to 1930*, Scientific Socialist Education Trust, 1976

Pepper, David, *Eco Socialism: from Deep Ecology to Social Justice*, Routledge, 1993

Plant, Christopher, Plant, Judith, (eds), *Putting Power In Its Place: Create Community Control*, New Society Publishers

Shiva, Vandana, *Staying Alive: Women, Ecology and Survival in India*, Kali for Women, 1988

Shiva, Vandana, *The Violence of the Green Revolution*, The Other India Press, 1997, second edition.

Sachs, Wolfgang, (ed.) *The Development Dictionary: A Guide to Knowledge as Power*, Zed Books Limited, 1992

Annexure I: The Radical Perspectives of the Indian Origins

Part A: The Gandhian Perspective

Mahatma or Mohandas Karamchand Gandhi is not only the leader of India's freedom struggle, but he has been a severe critic of the Modern-Western Capitalism. He was also a visionary who not only professed many alternatives but also implemented many of them in his personal life. He also created many institutions to work on these alternatives and disseminate them.

As mentioned here, Gandhi remained highly critical of the capitalist economy and modern western civilization. His major points of criticism are summarized below.

- Gandhi maintained that capitalism, socialism, communism and all such 'economically' orientated ideologies rested on the 'materialist' view of man, which equated the human being with the body. Modern civilization saw man as an essentially self-centered being who found his fulfillment in the gratification of his ever increasing and inherently insatiable wants. Capitalism was based on the belief that most men were likely to satisfy most of their desires most of the time under a system of private property.
- Gandhi regarded the concept of private property underlying capitalism as logically incoherent. It was based on a misguided notion of self-ownership. The individual owed his existence, survival, intellectual and moral capacities, character, skills, ambition, motivation, in short his very humanity to others. Since his capacities etc., were socially derived, they were not his private property but a social trust, a collective asset of which he is only custodian.
- Capitalism was an exploitative system propelled by greed and based on the survival of the fittest. It created large-scale unemployment and condemned millions to miserable lives.
- Capitalists led equally empty and inhuman lives devoted to the pursuit of mindless pleasures.
- Industrialism involves tyranny, vanity, pride, greed, selfishness, ruthless competition on the one side, and loss of liberty, insecurity, fears, loss of self-reliance on the other.
- Deaths, maiming and crippling by industrial accidents far exceed corresponding injuries by war. Industrialization involves diseases and physical deterioration and the growth of large cities with their smoke, dirt, noise, bad air, lack of sunshine and outdoor life, slums, disease, prostitution, and unnatural living.
- In industrial society, man is made to obey the machine. The wealthy and middle classes become helpless and parasitic upon the working classes. The ordinary city-dweller cannot make his own clothing or produce or prepare his own food. The cities become parasitic upon the country; industrial nations upon agricultural nations.
- Gandhi's major criticism was directed against the modern west and its encroachment on the rest of the globe. Gandhi rejected the modern west primarily because of its secular scientific worldview. The distinguishing characteristic of modern civilization is an indefinite multiplicity of human wants.

The Alternative

Gandhi thought that the economic order should be embedded in and subordinated to the civilization of the wider society. Gandhi's alternative to capitalism rested on the following principles.

- Every adult had a right to work. Human beings needed to work in order to acquire such basic human qualities as a sense of self-respect, dignity, self-discipline, self-confidence, initiative and the capacity to organize their energies and structure their personalities.

- Economic life should be in harmony with and create conditions necessary for moral and spiritual development. According to Gandhi, human beings could only realize their full moral potential in small, relaxed, self-governing and interdependent communities. He argued that production should be decentralized and each community should become relatively self-sufficient in its basic needs. The village land is to be owned in common, farming done on a cooperative basis, the produce equitable divided, and only the surplus land is to be used for cash crops. The villages are to encourage locally based industries and crafts and to import only what they could not produce themselves. Full employment, which Gandhi regarded as the necessary requirement of man's spiritual nature, could only be secured in such self-sufficient communities.
- Village communities should form the basis of the Indian economy. The nature, pace and scale of industrialization should be determined by and subordinated to their requirements. Large-scale industries are necessary, but they have to be restricted to the minimum, located in the cities, and only allowed to produce what the self-sufficient communities themselves could not. Since competition between the two necessarily leads to the latter's destruction, a national plan is to lay down what share of the market is to be reserved for each. Gandhi regarded it as the only way to avoid the rise of huge and inhuman cities and the urban exploitation of the countryside.
- The means of production of the basic necessities of life should be collectively owned. They affected human survival and could easily become instruments of the most dangerous forms of exploitation. Industries of vital national importance should be owned by the state, which should either set them up itself or nationalize 'without compensation'.
- Since all socially useful activities were equally important, their wage differentials should be reduced to the minimum.
- Since a healthy moral community was impossible in a grossly unequal society, the state had to embark on a program of leveling up the poor and the oppressed and leveling down the rich.

Theory of Trusteeship

Theory of trusteeship aimed to socialize property without nationalizing it. Accordingly, every industrialist employing more than a certain number of workers is to look upon his industry not as his property but as a social trust. He is to work along with his employees, take no more than what he needs for a moderately comfortable life, and be responsible for the management of industry. If capitalists are not ready to become trustees of their property, Gandhi was reluctantly prepared for the state to impose trusteeship by law.

- Trusteeship provides a means of transforming the present capitalist order of society into an egalitarian one. It gives no quarter to capitalism, but gives the present owning class a chance of reforming itself. It is based on the faith that human nature is never beyond redemption.
- It does not recognize any rights of private ownership of property except insofar as it may be permitted by society for its own welfare.
- It does not exclude legislative regulation of the ownership and use of wealth.
- Under state-regulated trusteeship, an individual will not be free to hold or use wealth for selfish satisfaction or in disregard of the interests of society.
- Just as it is proposed to fix a decent minimum living wage, a limit also should be fixed for the maximum income that would be allowed to any person in society. The difference between such minimum incomes should be reasonable and equitable and variable from time to time.

- Under Gandhian economic order, the charter of production will be determined by social necessity and not by personal whim or greed.

Ideal society

Gandhi's ideal society then was semi-industrialized (the villages must become self-sufficient and self-reliant), economically more or less self-sufficient, substantially egalitarian, based on cooperative production and ruled out extensive international trade. It involved medium size agro-industrial residential units, nationalization of basic industries, heavy taxation, death duties, state regulation of ownership, and workers participation in the management of industries. The centrality of the state, extensive government control of the economy, large-scale industrialization, and bureaucracy are absent in Gandhi's society. The pursuit of profit, the more or less unlimited right to acquire and dispose of property, competition, and integration of the national economy into the world market, unregulated mechanization and the ever-increasing scale of production, which constitute the basic preconditions of the capitalist economy, are also absent.

Part B: Phule-Ambedkar Perspective

Phule-Ambedkar thought is an important viewpoint to analyze the social system in India. Though both of them represented different periods, their primary concern was the caste system in India, which subjugated a large section in the society to subhuman, level and entails exploitation and oppression of the so-called lower castes. Phule and Ambedkar both severely attacked the caste system and believed that abolition of caste system is the only way to ensure more equal and just society. The end of exploitation involved in caste system is regarded as the primary condition if all human beings are to attain material, moral and spiritual development. The creation of society sans exploitation where all individuals will realize their freedom and will share equal rights was the dream of both the thinkers. Phule and Ambedkar both have developed an in-depth analysis of caste system, its historical roots, and its present scenario. They also evolved the strategies to overthrow the caste system and to lead towards more humane society. We have summarized the analysis of caste system made by Phule and Ambedkar and the conception of their ideal society.

Analysis of the Caste System

Caste system is not merely division of labor but it is also an unnatural division of laborers into watertight compartments. This division of labor is not spontaneous; it is not based on natural aptitudes. The division of labor brought about by caste system is not a division based on choice. Individual sentiment, individual preference has no place in it. It is based on the dogma of predestination. It is a hierarchy in which the divisions of laborers are graded one above the other. Caste system involves an attempt to appoint tasks to individuals in advance, selected not on the basis of trained original capacities, but on that of social the social status of parents. By not permitting readjustments of occupations, caste becomes a direct cause of much of the unemployment in the country.

As an economic organization, caste system is a harmful institution, inasmuch as it involves the subordination of man's natural powers and inclination to the exigencies of social rules. The caste system is basically sustained by the peculiar economic constitution of the Indian village of which the land relations were the main features. Caste does not result in economic efficiency. It has completely disorganized and demoralized the population. Virtue has become caste-ridden and morality has become caste-bound. The caste system represented institutionalization of the inequality by the Hindu religion as ordained by its Gods. Caste system prohibits persons belonging to different castes from intermarrying.

The anti social spirit is the worst feature of caste system. Caste has killed public spirit. It has poisoned the mutual relationships in the society. There are many warring groups each living for itself

and for its own selfish ideal. Caste consciousness has served to keep the memory of past feuds between castes green and has prevented solidarity. The higher caste Hindus have deliberately prevented the lower castes from rising to the cultural level of the higher castes. The associated mode of life among Hindus does not create fellow-feeling. Indifferentism among Hindus has made mobilization and cooperation impossible. A caste has an unquestioned right to excommunicate any man who is guilty of breaking the rules of caste. The excommunication involves a complete lack of social intercourse. The effect of caste on ethics of Hindus is deplorable.

Phule and Ambedkar's struggle directed towards the emancipation of all the oppressed castes. Their thought expressed a drive for abolition of the entire caste system. It was basically against the systemic exploitation. Their thinking was based upon the principle that an irreconcilable conflict of interests existed between the upper-caste elite and lower-caste masses. Because of this, any effort to achieve equality necessitated an attack on privileges and position of elite.

The Ambedkarian Alternative

Ambedkar advocates a society based on liberty, equality and fraternity. The conception of the ideal society ought to have them all the three together. An ideal society should be mobile, should be full of channels for conveying a change. In Ambedkar's conception of an exploitation-less society, democracy has an extraordinary role. His conception of democracy appeared to be purely people oriented. He proposed a fundamental change in the concept of equality. It envisaged complete abolition of inequality. His principle of positive discrimination is based on this very concept of equality. Democracy is not merely a form of government; it is primarily a mode of associated living, of conjoint communicated experience.

Ambedkar expected the state institution to act as per the constitutional structure and endeavored to incorporate the pro-*dalit* bias into the constitution. Ambedkar's economic ideas reflect the influence of socialism. He relies on state for materialization of his conception of socialism. He wanted the state to intervene in the economic structure and its monitoring. He wanted to constitutionalize this state intervention. He maintained that all important industries and services should belong to the nation. He proposes nationalization of land and promotion of co-operative farming on a collective principle. Private sector and entrepreneurs shall have a role in the economy but it shall not be dominating. Insurance industry shall be in public sector and insurance will be compulsory for every citizen.

The Alternative from Phule

Phule tried to provide the moral-religious basis of society in the form of '*Sarvajanik Satya Dharma*'. The moral basis of society had to be centered on truth, or rationality, and it had to be one that unified all men and women as equals. The world was seen as good and holy, because it is god's creation; and god is seen as the loving parent of all humans who are thus equally valued as his children. This basic concept was used in all *Satyashodhak* teachings to justify the idea of equality and the assertion that no middleman or priest was necessary between man and god. The primary emphasis in *Satyashodhak Samaj* was on 'truth seeking'.

Phule's thought expressed a drive for abolition of the caste system. Phule saw the peasant masses as toiling under a double exploitation-that of Brahman elite as well as that of the feudal rulers. Phule focused on problems of agriculture and spoke from the viewpoint of the peasant. Phule did not see industrialization as a solution to Indian backwardness. In a primarily agricultural country the remedy for mass poverty lay in a direct solution of the agrarian problems. He urged extensive action by govt. for the improvement of agriculture. He did not feel that economic or educational benefits to a small section would eventually result in overall social progress.

Phule wanted sweeping changes within village society itself. He wanted to revolutionize village society. All the *vatan* posts should be opened up to all on the basis of merit through special training schools. Thus the entire *balutedar* system with its relation to traditional caste privileges and functions was to be destroyed along with the hereditary linking of caste and occupation. Similarly, the traditional, moral, and social life of the masses had to be drastically reformed.

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