CHAPTER-1
SUSTAINABLE DEVELOPMENT, SUSTAINABLE RURAL DEVELOPMENT
AND NGOs: CONCEPTUAL ANALYSIS AND SURVEY OF LITERATURE

1.1 SUSTAINABLE DEVELOPMENT

Before we go for elaborating a conceptual analysis of ‘sustainable rural development’ and the ‘Non-Government Organisations (NGOs)’ a broad analysis of the term ‘sustainable development’ need to be elucidated so as to understand the genesis and evolution of the concept and its underpinnings. In addition to this only the relevant dimensions of sustainable development like poverty, environment, natural resources, people’s participation, common property resources and women empowerment will be discussed so as to have a clear understanding of the sustainable rural development in totality.

Although the need for sustainable development is being accepted more and more, maintenance of environment quality and many important values of natural systems are still not being given adequate consideration in development planning and decision making, both in developed and in developing nations. In spite of the growing knowledge about the importance of natural ecosystems to human welfare, it seems difficult for man to translate this knowledge into concrete actions to stop the ongoing destruction of natural areas and begin to implement the concept of sustainable development in practice. Some of the many reasons for the slow implementation of the integration of conservation and sustainable development in every planning and decision-making is the difference between political and economic interests, that mainly focus on the short term gains, versus conservation objectives which mainly aim at long-term benefits. Sustainable development is further hampered by the difficulty to express the effects of economic development on natural systems in terms that are familiar to, and persuasive with decision makers.¹

The concept of sustainable development grew out of the “Limits to Growth” debate of the early 1970s which discussed whether or not continuing economic growth would inevitably lead to severe environmental degradation and societal collapse on a global scale. By the late 1970s after much further debate an apparent resolution of the problem was reached with a consensus that

economic development could be sustained indefinitely but only if development is modified to take into account its immediate dependence on the natural environment² ³ ⁴.

Sustainable development, a ubiquitous catchphrase of this decade, has now become very much a part of conservationist and environmentalist thinking. Defined variously by different people, the term in its usual sense refers to the process developing in a sustainable way and was coined to strike a middle ground between more radical approaches which are averse to all development and the idea of development conceived in total utilitarian, business like terms.

The concept of 'sustainable development' was first introduced in the World Conservation Strategy (WCS) published by the International Union for Conservation of Nature (IUCN) in 1980. The three main objectives of this strategy are maintenance of essential ecological processes and life support systems, preservation of genetic diversity, and sustainable utilisation of species and ecosystems. This strategy attempts to demonstrate that conservation of nature is not necessarily incompatible with economic development and stresses the need for sustainable development through integration of conservation objectives and economic goals.⁵

In 1991 IUCN published a second major policy statement, 'Caring for the Earth', where the focus has shifted from conservation to sustainable living- a concept based on ecological integrity and new critique on development. One of the cardinal principles of this concept is respect and care for the community life, which is in fact one great interdependent system. It defines sustainable development as: 'improving the quality of human life while living within the carrying capacity of supporting ecosystems'.

The usage of the term sustainable development has gained greater currency since the publication of the Brundtland Report, 'Our Common Future' in 1987 under the auspices of the World Commission on Environment and Development (WECD). Conservationist saw this as a real big push for promoting Sustainable Development.

Sustainable Development, according to Brundtland, is development that meets the needs of the present without usurping those of the future generations. This definition has no doubt

considerable rhetorical elements and emotion awakening appeal. It seems to touch upon two
delicate chords in our hearts, namely, I) the sense of guilt we all have about we have done to the
planet and II) the intrinsic human desire to make sure our children's' future is provided for.

In fact, concern for people has been the overriding concern in the Brundtland report. The
WCED maintains that sustainable development is a process of change in which exploration of
resources, the direction of investments and the orientation of technological development and
institutional changes are made consistent with future as well as present needs.

The concept got further boost and greater attention since the United Nations Conference
on Environment and Development (UNCED), popularly known as Earth Summit, held in Rio de
Jenerio in June 1992. In the wake of the Earth Summit, a commission of the UN called the
Commission of Sustainable Development (CSD) was formed. The summit was billed as the most
serious effort so far at creating a consensus on sustainable development in which 120 heads of
state of governments participated. All the nation states have either already prepared national
sustainable development plans or strategies or in the process of preparing national strategies for
submission to the Commission. Besides, the concept now engages the attention of government,
NGOs, civil servants, environmental activists, development agencies, planners, environmental
agencies and a host of academics.

Besides the above major global initiatives in the direction of formulation of concepts and
strategies for sustainable development, there have been several other efforts in the broad area of
environment and conservation that in no small measure helped the crystallisation of the concept.

The most prominent one among these is the UN Conference of Human Environment
(UNCHE) held in Stockholm in 1972 which is undoubtedly a milestone in the development of
global responses to environmental issues. Though it did not directly discuss sustainable
development, it however, noted that development and environment could be managed to the
advantages of both, without saying how this could be achieved. Further, it had remarked that
development could proceed without being impeded by measures to protect the environment.

The 'Blue print for Survival' published by the British Journal of Ecologist in 1972, the
'Limits to Growth' published by MIT research team led by Dennis and Donella Meadows, the

report of the ‘Club of Rome’ by a group of industrialists in 1972. ‘Cocoya Declaration’ based on the conference on ‘Pattern of Resource Use, Environment and Development’ held in Cocoya, Mexico, in 1974 and the Mar del Plata Action Plan (MPAP) based on the UN water conference in Mar del Plata, Argentina, in 1977 are some of the global efforts that have contributed to the growth and development of the concepts of sustainable development.

‘The Limit to Growth’ observed that if the current growth trends in world population, industrialisation, environmental pollution, congestion, food production and resource depletion at rates far beyond the natural vegetative capacities continued unabated, the limit to growth on this planet would be reached by the turn of the 21st century. It is, however, possible to alter these growth trends and set the conditions for ecological as well as economic stability if the current patterns of consumption, investment and growth are suitably changed.

To understand the nature of sustainable development, one needs to go back to the concept of development and its characteristics. The policies with regard to development will have a bearing on policies for sustainable development. Development is essentially a total process. Pursuing development centred with growth and only growth and increase the GNP has put a big question mark in the development paradigm being followed today globally. The outcome of growth oriented development is poverty and increase in disparity of income distribution, a most discernible global phenomenon the world faces today. With no end to poverty in the developing countries the development planners sought to identify unemployment as the crucial factor of development. This too did not improve the living conditions of the poor. The present emphasis is on meeting the basic needs: These include survival needs - social, cultural and welfare needs.

It would thus, seem that the ultimate goals of development have yet to emerge clearly. A World Bank Report admitted that despite good progress over the past generation, more than two billion people still live in acute poverty and suffer from grossly inadequate access to the resources required to give them a chance for a better life. It means that there has to be some full stop to begin with a new strategy and new policy to bring to an end to the dehumanised development policy objectives. The new strategy is obviously sustainable development.

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8 ibid.
Sustainable development stresses the importance of permanent growth and development. Many past development policies have been based on the idea of a rush for growth, which was the result of beliefs about the lessons that history holds for the development process. Thus the achievement of the industrial world reflect a particular path of transition that moves from agriculture to industry to service-oriented economies. That transition was achieved at the cost of often-irreversible damage to the environment. The philosophy of sustainable development challenges the idea that this process can or must be replicated for the developing world.  

According to CIDA the concept of sustainable development rests on five pillars. They are:

- environmental sustainability,
- economic sustainability,
- political sustainability,
- social sustainability, and
- Cultural sustainability.

The five elements as stated above should not be seen as each standing independently. They are closely linked, and efforts to promote one of the pillars must take explicit account of the implications of the others. Sustainable development can only be achieved if development efforts respect all five elements. The framework for sustainable development suggested by CIDA is presented in Figure: 1 as follows:

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11 David, W. Pearce
Environmental 
sustainability

<table>
<thead>
<tr>
<th>Environmental sustainability</th>
<th>Economic sustainability</th>
<th>Political sustainability</th>
<th>Social sustainability</th>
<th>Cultural sustainability</th>
</tr>
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<tbody>
<tr>
<td>Ecosystem integrity</td>
<td>Appropriate economic policies</td>
<td>Human rights</td>
<td>Improved income distribution</td>
<td>Sensitivity to cultural factors</td>
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<tr>
<td>Biological diversity</td>
<td>Efficient resource allocation</td>
<td>Democratic development</td>
<td>Gender equity</td>
<td>Recognition of values that are conducive to development</td>
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<td>Population</td>
<td>More equitable access to resources, including gender equity</td>
<td>Good governance</td>
<td>Investing in basic health and education</td>
<td>Emphasizing participation of the beneficiaries</td>
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Increasing productive capacity of the poor


Environmentalists, economists and social scientists have seen sustainable Development as a concept from different perspectives. The concept as perceived by environmentalists is as follows:

Brown et al.\(^{13}\) says sustainability means the indefinite survival of the human species across the world. A broader sense of the meaning species that virtually all humans, once born, live to adulthood and that their lives have quality beyond mere biological survival. While Clark\'s views that a major challenge of the coming decades is to learn how long-term, large-scale interactions between environment and development can better be managed to increase the prospect for ecologically sustainable improvements in human well being.

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\(^{13}\) Brown et al.
To Goodland and Ledec\textsuperscript{14} sustainable development is a pattern of social and structural economic transformations which optimises the economic and societal benefits available at present, without jeopardising the likely potentials of similar benefits in the future. They put that a primary goal of sustainable development is to achieve a reasonable and equitably distributed level of economic well being that can be perpetuated continually for many human generations.

A refined version of the term sustainable development later put forward by them wholly from conservation angle which says sustainable development implies using renewable natural resources in a manner which does not eliminate or degrade them, or otherwise diminish their usefulness for future generations. It further implies using non-renewable mineral resources in a manner, which does not unnecessarily preclude easy access to them by future generations. The definition further implies depleting non-renewable energy resources at a slow enough rate so as to ensure the high profitability of an orderly societal transition to renewable sources.

Talbot\textsuperscript{15} in his conservationist overtone argues that one of the basic objectives of the conservation is to ensure that the utilisation of living resources, and the ecosystems, in which they are found, is sustainable. While Tolba\textsuperscript{16} though belongs to conservation school of thoughts put forward more pragmatic views on sustainable development saying that the concept of sustainable development encompasses:

1. help for the very poor because they are left with no option other than to destroy their environment;
2. the idea of self-restraint development, within natural resource constraints;
3. the idea of cost-effective development using different economic criteria to the traditional approach; that is to say development should not degrade environmental quality, nor should it reduce productivity in the long run;
4. the great issues of health control, appropriate technologies, self-reliance in food, clean water and shelter for all;
5. the notion of the people-centred initiatives are needed; human beings, in other words, are the resources in the concept.

\textsuperscript{14} Goodland and Ledec
Panayotou, T.\textsuperscript{17} elaborated five conditions that all development projects, programmes and policies must met for qualifying the sustainability criteria:

- limit population growth rates to the levels below the some of rates of capital accumulation and technological advancements,
- alleviate poverty and reduce income disparities,
- maintain ecological balances, renewable resource base, cultural stocks, human made capital stocks, and assimilative capacity of the environment, and
- avoid irreversible changes in the environment.

Hare, W.L., et. al.\textsuperscript{18}, proposes that the guiding principles for ecologically sustainable development, inter-alia, needs to include:

- equity-intergenerational,
- cautious policy approach to resource use,
- qualitative human resource development,
- genuine community participation in policy formulation and implementation for graduation into a sustainable equilibrium.

The landmark World Bank\textsuperscript{19} paper "Environment, Growth and Development" views that sustainable development satisfy the multiple criteria of sustainable growth, poverty alleviation, and sound environmental management. To the Bank environmental management, to a large degree, should be seen as a means of attaining the wider objectives of sustained economic growth and poverty alleviation. It further says elevating concern about environmental matters and developing the capacity to implement sound practices for environmental management are needed to reconcile, and, where appropriate, make trade-offs among the objectives of growth, poverty alleviation, and sound environmental management.

Sustainable development as a concept figured in the development lexicon when the world continue to witness a meteoric rise in problems arose due to rapid degradation and degeneration of natural resources, due to population growth and the wild quest for economic growth per se. The sheer and perpetual neglect of the importance of natural resources in development

\textsuperscript{17} T. Panayotou: The Economics of Environmental Degradation Causes and Responses, Development discussion Paper no. 335, Harvard university, Cambridge, 1990.
\textsuperscript{18} W.L., Hare.
\textsuperscript{19} World Bank, Environment, Growth and development, Development Committee Pamphlet 14, (Washington, D.C., 1987).
undertakings in some part of the world already cast its wrath on the most vulnerable people, in particular the women, who do not have access to land and other fundamental resources.

While conservationists make it a point the need for a paradigm shift in pursuing existing practice of growth in view of dwindling resources and emerging conflicts over the access to natural resources the real wake-up call came into being that the present development paradigm has to be changed. Especially the conventional economists, who are at the helm of designing development and evolving development policies, found it really embarrassing for their actions.

At the very outset when the sustainable development concept drew the attention of the global leaders and people at large the conventional economists did not welcome it. As a matter of fact they started to find fault in the coinage of the concept by the conservationists. This of course led to emergence of a new class of economists who argue for integration of ecology and economy in the development undertakings.

So, the need for ecology-economy interface has become a new paradigm. A new consensus has been found place in the developmental arena where ecology- economy interface is genuinely looked. Following are some of the definitions on sustainable development that appears to be very pragmatic in the context of emerging reconciliation over the sustainable development issue.

Bartelmus\(^\text{20}\) views that the overall goals of environment and development are not in conflict but are indeed the same. Tolba\(^\text{21}\) puts that economic development and environmental quality are interdependent and, in the long term, mutually reinforcing. The rational management of the world's threatened natural resource base forestalls a loss in environmental quality and enhances sustainable economic growth.

The Brundtland Report\(^\text{22}\) considered to be a unique document in the human history also recognises that it is impossible to separate economic development issues from environmental issues; many forms of development erode the environmental resources upon which they must be based, and environmental degradation can undermine economic development. It admits that poverty is a major cause and effect of global environmental problems.

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\(^{21}\) Tolba, n. 12.
The World Bank\textsuperscript{23} in its report titled "Environment, Growth and Development" observes that promoting economic growth, alleviating poverty, and protecting the environment are mutually supportive objectives in the long run. While the 1993 Human Development Report\textsuperscript{24}says "sustainable development is a process in which economic, fiscal, trade, energy, agriculture and industrial policies are all designed to bring about a development that is economically, socially and ecologically sustainable". The report further says that in general the minimum requirements for achieving sustainable development include:

- the elimination of poverty;
- more equitable distribution of resources;
- healthier, more educated and better trained people;
- more equitable liberal trading systems within and among countries;
- better understanding of the diversity of the eco-system, locally adopted solutions to environmental problems and better monitoring of the environmental impact of development activities.\textsuperscript{25}

**Dimensions of Sustainable Development**

As mentioned earlier that sustainable development has five important dimensions of which social and environmental dimension will only be the subject matter of discussions because if three other dimensions are incorporated it will be a cumbersome presentation of analytical framework. Therefore, within the limited scope of the present study an analytical framework of social and environmental sustainability of rural development will be discussed.

**Social Dimension**

The social dimension of sustainable development emphasises that the key actors are human beings, whose pattern of social organisation is crucial in devising viable ways to achieving sustainable development.\textsuperscript{26} The UNDP's notion of sustainable human development consists of three major elements: development of the people, development by the people and development for the people.\textsuperscript{27} While the WCED report admits that sustainability is fundamentally linked to

\textsuperscript{23} World Bank, n. 13.
\textsuperscript{25} Ibid.
concepts of social justice and equity. It acknowledges that achieving sustainability requires a fundamental change in the way natural resources are owned, controlled and used. 

Colchester in the same vein says that sustainability emphasises four basic principles when applied to rural communities: that basic needs must be met; that resources should be subject to local control; that local community must have a decisive say in planning; and that they should represent themselves through their own institutions.

Taking an even more human-focused approach than that reflected in the WCED report Chambers argues for using “sustainable livelihood security” as an integrating concept. It combines three approaches to development, namely environment-oriented, development-oriented and livelihood-oriented. The Rio Earth Summit in its Agenda 21 includes a chapter on promoting “sustainable livelihoods” for the poor, and this builds on the positive experiences of many community-based initiatives in resource management.

Evidence is mounting that failure to pay sufficient attention to social factors seriously undermines the effectiveness of development programmes. A 16-country comparative analysis of Asian experience by the Rural Development Committee at the Cornell University found national success, measured in terms of both agricultural productivity and social welfare indicators, is strongly correlated with systems of participatory local organisation, linking rural communities to national centres of decision-making and implementation.

The success of poverty alleviation programmes depends on how effectively the stakeholders are really involved in different stages of the projects. Sheldon in a study on the World Bank financed poverty-alleviation programmes found that long-term sustainability of projects is closely linked to active participation by the poor. Cemea in another study on the World Bank financed projects found a strong correlation between project success and the participation of grassroots organisations.

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28 WCED, n. 16.
Social Sustainability

Social sustainability comes under the purview of social dimension can be described as the framework needed for continued long-term social progress. Efforts to enhance social sustainability should include:

- Improving income distribution;
- Striving for gender equity;
- Investing in basic health and education;
- Emphasising participation of the beneficiaries.

The distribution of income in a given country is determined in a large part by the relative power of various groups. Dominant groups reinforce existing inequities in the distribution of power to shape policies and institutions to their advantage. Total reliance on market solutions to achieve a more equitable distribution of income may result in conditions, which are inconsistent with increased income equity.

When the question of income equity comes the most vulnerable section of the society i.e., the poor and women in particular predominate because of perpetual neglect and injustice made over them by the state and society itself. This has led to states and non-government organisations to give increasing recognition to the importance of more integration of women in the development process.

As UNFPA in its “State of World population” report rightly observed that economic development programmes, however, would not automatically improve the condition of women. This improvement will result only from deliberate and effective public action that enables people to participate in, and benefit from, the process of development- to develop their individual capacities and put them into the most creative and productive use.

Ecological Dimension

The “ecological” criterion for sustainability admits the likelihood that some of the important functions of the natural world cannot be replaced within any realistic time frame, if

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ever, by human technology, however sophisticated. The need for arable land, water and benign climate for agriculture is an example: the role of reducing bacteria in nutrient cycling in the biosphere is another. The ecological criterion for long-run sustainability implicitly allows for some technological intervention but does not admit the acceptability of major climatic changes, widespread desertification, deforestation of the tropics, accumulation of toxic heavy metals and non-biodegradable organic in soils and sediments, or sharp reductions of bio-diversity.

The ecological dimension of sustainable development centred round improving and maintaining the well being of people and ecosystems. Human well being exists if all members of the society are able to define and meet their needs and have a large range of choices and opportunities to fulfil their potential. Ecosystem well-being means ecosystems maintain their quality and diversity and thus their potential to adapt to change and provide a wide range of options for the future. 17

The twin pillars of sustainable development are respect and concern for people and ecosystems. As IUCN and UNEP view that development will be sustainable if following fundamentals are adopted:

1. Improvement of quality of human life: The purpose of development is to improve the quality of human life. It should enable people to realise their potential and lead lives of dignity and fulfilment. Economic growth is part of development, but it cannot be a goal in itself. Development is achieved only if it makes lives better in the aspects of a long and healthy life, education, access to resources needed for a decent standard of living, political freedom, guaranteed human rights and freedom from poverty, hunger, malnutrition, access to food and basic entitlements and so on.

2. Conservation of Earth's vitality and diversity: Development must be conservation-based: It must protect the structure, functions and diversity of the world’s natural systems on which our species depends. To this ends it is needed to:

- Conserve life-support systems: These are the ecological processes that shape climate, cleanse air and water, regulate water flow, recycle essential elements, creates and regenerate soil, enable ecosystems to renew themselves, and keep the planet fit for life.

• Conserve biological diversity: including all species of plants, animals and other organisms, the range of genetic stocks within species, and the variety of ecosystems.

• Sustainable uses of renewable resources: these resources include soil, wild and domesticated organisms, forests, rangelands, farmlands, and the marine and freshwater ecosystems that support fisheries.

• Minimise depletion of non-renewable resources:

• Keep within the Earth’s carrying capacity

The fundamental requirement of ecological sustainability or environmental sustainability whatever we call is to ensure the earth’s natural wealth by adopting following measures:

• maintain the integrity of ecosystems and the continued health of the earth’s life support systems on which the productivity, adaptability and renewal of all life depends.

• maintain biological diversity in the variety of life on which ecological process depends.

• ensure sustainable population dynamics, focusing on the size of population, its growth rate and its distribution, as this issue often translates into pressures on the environment.

Ecosystem integrity

Ecosystem integrity as Munn explains is characterised by complexity, stability, diversity and resilience. Ecosystems are resilient in that they contain mechanisms, which permit them to adapt to natural and human-made shocks from outside. But overloading beyond certain thresholds-thresholds we sometimes do not recognise until they have been crossed-natural systems can collapse with alarming speed and with many changes, which are irreversible.

Environmental sustainability calls for come to terms with the ecosystem concepts like carrying capacity, assimilative capacity, and sustainable use of renewable resources. Carrying capacity is the ability of an ecosystem to sustain a certain population and density of people and

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38 CIDA, n. 26.
animals. If the carrying capacity is exceeded, basic resources such as vegetation and soil become degraded, threatening the very stability of the ecosystem. Technology is an important dynamic variable in determining carrying capacity. Within limits, technology can increase the inherent productivity of natural resources such as land, and can reduce the negative environmental effects of resource exploitation.

The assimilative capacity of an ecosystem is its ability to absorb waste discharged into its air, water and land. The limits of this capacity are set by the nature and rates of the purifying natural processes. While the sustainable use entails that the rate of renewable resource harvests can be sustained up to a level set by the ability of the resource to regenerate.

Environmentally sustainable development calls for understanding of:

- Natural Resources Demand: Whether the present and anticipated demand for natural resources directly or indirectly is within the carrying capacity of the ecosystem.
- Pollution: whether the environmental impact of development projects and activities and of the development model, as operationalised through the plan, especially in terms of air, water, land etc. is within the carrying capacity of the ecosystem.
- Patterns of Resource Use and Distribution: The patterns of resource consumption and distribution that development strategies and specific projects represent, as these have an impact on the society and culture of a nation and consequently, on its environment. 41

There are degrees of environmental sustainability. Each country has to decide for itself and its regions and specific locations, the level of ecological disturbances and modification acceptable, within the limits prescribed by ecology. Also of relevance is the acceptable time frame within which an ecosystem must repair itself. For a nation to establish an environmentally sustainable development order, what is required a minimum is integrated development plan which indicates how best social and economic goals can be achieved in an environmentally sustainable manner, and determines priorities between different demands. 42

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Biological diversity

There are three aspects of biological diversity: genetic diversity, species diversity, and ecosystem diversity. Genetic diversity is the some of chromosomal information contained in the genes of individual plants and animals. Species diversity refers to the variety of living organisms on the earth. Ecosystem diversity is the variety of habitats and biotic communities, which are found on the earth.

Diversity contributes to the resilience of systems. It increases the ability of any system to absorb shocks and keep on functioning. Diversity is important in many areas of sustainability. Maintenance of biological diversity is a prerequisite for ensuring that natural resources will be available for the use of others today and in the future. It is also a foundation of ecosystem resilience and stability.

Biological diversity is important to human development. Its value to consumptive use is much larger than commonly realised. As well, such diversity has an indirect value in future options for species not yet identified or valued, and in human attachment to species and special places.

To conserve biological diversity, one must

- protect natural ecosystems and representative examples of modified ecosystems;
- maintain as large an area as possible of modified ecosystems that support a diversity of sustainable uses and species; and,
- be prudent about conservation of land agriculture.

Sound environmental management is necessary to attain the goal of environmental sustainability. This entails:

- environmental protection—the maintenance of clean water, land and air;
- rehabilitation and restoration of degraded ecosystems and natural resources;
- enhancement of the productive capacity of natural and human-managed ecosystems.

\[\text{Ibid.}\]
The environment has two important economic roles: as a source of raw materials and services, and as a sink of wastes. Sustainability requires that both source and sink be used within their capacities. These economic roles have important implications for natural resource development.

There is still debate over whether long-term economic growth and environment sustainability is compatible. Some have argued that in the short term, sustained economic growth and environmental sustainability tend to be substitutes. Because environmental sustainability maintains the productive base of natural resources and thus promotes economic sustainability, in the long-term the quality of economic growth must change so that it complements environmental sustainability.

Sustainable development of renewable resources means:

- not impairing the economic productivity of passive functions (such a the store of biological diversity in tropical forests), and
- applying the principles of sustainable yield management, as is already evident in some forestry and fishery practices.

While the renewable resources can be generated afresh the non-renewable resources having an absolute base are depleted with use. The concept of sustainable yield obviously does not apply to them. Sustainable development, in the context of non-renewable resources, means:

- using them in a manner which does not unnecessarily preclude easy access to them by future generations;
- depleting them at a low enough rate so as to ensure a high probability of an orderly societal transition to discovery, development and acceptance of renewable substitutes; and
- limiting the negative impacts of activities associated with their production and consumption on the productivity of renewable environmental resources.

The term sustainable development has drawn unwarranted criticism from the classical economists and sometimes from the neo-economists for its so-called ambiguity. It drew wide range of interpretations, many of which are contradictory. The confusion has been caused because “sustainable development”, “sustainable growth”, and “sustainable use” have been used
interchangeably, as if their meanings were same. They are not. If an activity is sustainable, for all practical purposes it can continue forever. In the same vein “sustainable growth” is a contradiction in terms because nothing physical can grow indefinitely. “Sustainable use” is applicable only to renewable resources: It means using them at rates within their capacity for renewal.⁴¹

Sustainable development as a strategy means: improving the quality of human life while living within the carrying capacity of supporting ecosystems. A sustainable economy is the product of sustainable development. It maintains its natural resource base.

A sustainable society lives by following principles:⁴⁴

- respect and care for the community of life
- improve the quality of life
- conserve the earth’s vitality
- conserve life-support systems
- conserve biodiversity
- ensure that uses of renewable resources are sustainable
- minimise the depletion of non-renewable resources
- keep within the earth’s carrying capacity
- change personal attitudes and practices
- enable communities to care for their own environments
- provide a national framework for integrating development and conservation and,
- create a global alliance.

The conceptual framework of sustainable development in the context of rural development has got much more dimensions. Before it is proceeded to elaborate sustainable rural development the conceptual framework of relevant interrelated aspects like poverty, demographic dynamics, environment, peoples participation, common property resources, natural resources and women issues and their interconnections with sustainable development need to be reviewed. As poverty and population growth is considered to be major threat to the sustainable development first of all this issue will be discussed.

⁴⁴ Munro and Martin, n. 75, pp. 8-11.
1.1.1 POVERTY, DEMOGRAPHIC DYNAMICS, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

The nexus of population growth, poverty and sustainable development especially in the rural context, is an area of growing national and international concern. Population growth is the principal driving force demanding modification of farming practices at the cost of land degradation. A number of intermediate factors are often as important as, or more important than, simple population growth itself. These are inequalities in access to rural resources, unequal land distribution and so on.\(^{45}\)

There exists a two-way relationship between poverty and the environmental degradation. Rural poverty causes environmental degradation, and in turn, degradation of the environment exacerbates rural poverty. The experiences of developing countries show that the poor are compelled to overexploit natural resources which inevitably leads to environmental degradation that is often irreversible. On the other hand, diminution of the natural resource base leads to a worsening of the rural poverty situation.\(^{46}\) Economic activities of the poor generally cause degradation of the soil and forest resources, and to a lesser extent degradation of agricultural water resources. For example, growing population pressure on limited land resources pushes the poor farmers on to marginal lands or compels them to 'mine the soil' through over-utilisation in their efforts to survive. Increasing population density also compels the poor to clear forestland and convert it into cropland; fuel needs of the poor are also generally met by cutting down trees.

It is, however, now widely recognised that the rural poor are not the only agents of environmental degradation. The non-poor also damages the environment in various ways, e.g., careless use of agro-chemicals, excessive use of irrigation water, and over-exploitation of forests and fish stocks. Public policy plays a crucial role in determining the pattern and intensity of natural resource use by both the poor and the non-poor, the distribution of benefits from such use between these two groups, and the extent of environmental degradation resulting from such activity. The pursuit of wrong macroeconomic and or sectoral microeconomic policies may


encourage activities, which degrade the environment, while appropriate policies will lead to the adoption of environment-friendly practices.

Poverty and environmental degradation form a trap from which there is little chance of escape. The linkage between poverty and environmental degradation provides perhaps the clearest demonstration of the centrality of social, political and economic issues in questions of environment and development. It is on the environment in which the poor people live and from which they draw their sustenance that concern about sustainable development has to focus.47

The environmental problems faced by countries vary with their stage of development, the structure of their economies, and their environmental policies. Some of the major problems are, however, associated directly with the lack of economic development. Thus, inadequate sanitation and clean water, indoor air pollution from biomass burning, and many types of land degradation in poor countries have poverty as their root cause. These mutually reinforcing effects of poverty and environmental damage are exacerbated by rapid population growth. The poor are both victims and agents of environmental damage. It is the poor that drive a large part of their livelihood from unmarketed environmental resources like common grazing lands, community forests or fisheries. The loss of such resources may particularly harm the poorest.

It has been often been argued that due to 'vicious circle of poverty', the poor people through their very survival strategies use land, water and other resources in such a way that the ensuing degradation either reduces or permanently impairs the productivity of those very resources.

The linkage between poverty and environmental degradation is more prominently visible with respect to common property resources (CPR), which are subject to individual use, but not to individual possession, rendering them highly prone to over-exploration, degradation and misuse by their co-owners or co-users. In the face of what Hardin48 called the 'tragedy of the commons', the rural poor, who depend, to a large extent on CPR have been gradually gaining less access to the sources of their livelihood.

How a ‘vicious circle of poverty’ can be linked to environmental degradation through use of private land is illustrated by some studies in the rural uplands of Java in Indonesia, where majority of farmers are poor and operate at the subsistence level. It was seen that adoption of terracing-based technology for soil conservation was limited to households with available cash to hire additional labour, those with enough adult male family labour to do it themselves and or more generally, wealthier households that could afford to forego wage employment during the dry season. The findings revealed that Upland Java farmers who did not adopt bench-terracing technology cited lack of money as the reason for not constructing terraces. From this study and some more on related studies established the linkages between the ‘vicious circle of poverty’ and environment.

Some say poverty does not necessarily in and of itself lead to environmental degradation. That depends on the options available to the poor and on their responses to outside stimuli and pressures. Poverty, however, removes their ability to respond and adapt because the time horizon is typically short and few options are available. This leaves only two types of reaction: they can attempt to supplement scarce assets by using the CPR, or they can leave the land altogether and move to urban areas.

Population growth is also seen as the heart of the problem. It acts as both an underlying cause and compounding factor. As Mellor observes that population growth in Bangladesh is reducing the average farm size, thus lowering productivity and deepening poverty. As poverty increases, the ability to escape environmental degradation is reduced even further. In Nepal, the same phenomenon leads farmers to clear and crop hillsides in an effort to maintain their income. The expansion of agricultural area takes place at the cost of deforestation and with increased soil erosion.

Environmental degradation such as deforestation, soil erosion and pollution are most visible around the poor settlements, both in the rural and urban areas. This has motivated some policy planners and social scientists to investigate direct causal linkages between poverty and the environment.

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One set of case studies found little evidence that poor communities had degraded their rural environments. These studies point to other factors causing environmental degradation, notably new roads that open up virgin territory and lead to agricultural colonisation, misguided price and other incentives, and population growth.

Hansen and Jagannathan have emphasised the role of market imperfections amplified by population pressure, existing power structures, institutions, property rights, and public policies in forming incentive structures, and directing producer and consumer resource flows between sectors and regions as the underlying cause of observed linkages between poverty and environmental degradation.

While there is a dispute between population growth and economic development, see the population element as soft underbelly of development in a sense that until now its theoretical relationships to development have not been sustained by empirical testing. The demographic-economic theory predicts that slower population growth will lead to faster rise in per capita income which, however, is not confirmed by historical evidences. On the other hand, the demographic transition theory which proclaims the inevitability of a global transition from high to low birth and death rates as a world society and economy develops was supported by past experiences though the scientists could not identify the threshold socio-economic and demographic indices that would predict the onset of fertility decline. The Brundtland Report implied the operation of the later theory for the world in general cited a different scenario where improvement in public health led to a sharp drop in mortality rates and has accelerated the growth rates at unprecedented levels.

Rapid population growth in excess of the carrying capacity of the natural environment often contributes to environment damage. High population growth can exacerbate the mutually reinforcing effects of poverty and environmental damage. The poor are both agents and victims of

57 Caldwell, n. 65.
environmental damage. Increased land hunger for cultivation, lack of technological knows how and discriminatory access to resources often compels the poor to cultivate the erosion prone hillsides and fragile marginal lands. The pressing short-term survival needs makes them miners of the existing natural resources base e.g., cutting trees, clearing forests, overgrazing of common lands and failing to replenish the depleted soil fertility through proper management.

The rural poor are not a homogenous group in their access to, and the degree of direct dependence on, the surrounding environment. The rural poor as a group tend to consist of the following categories:

- small farmers, owner cultivators or tenants, operating less land than needed to earn a standard of living above some nationally defined poverty line;
- agricultural labourers, with little or no land, either casual, attached or bonded waged labour;
- artisans, craftsmen, weavers, and other non-agricultural workers engaged in petty production, trade, services, etc.;
- the old, handicapped and destitute with no regular income.

In the above categories of the segments of the rural poor, some are more directly attached to the natural resource base and natural environment than others.

Environmental degradation is also explained by poverty, population growth, indebtedness, the international trading structure, misguided multilateral aid policies, and environmentally insensitive private foreign investment. All these factors are relevant, but focusing only any one of them is simplistic and misleading. Poverty cannot be an exclusive cause of environmental degradation since many poor countries practice successful resource conservation and rich countries use more resources and emit more wastes than poor ones. Rapid population growth undoubtedly depletes resources and threatens sustainable development, but it aggravates the situation when it is accompanied by misdirected policy measures.

Environmental degradation is popularly explained by poverty, population growth, indebtedness, the international trading structure, misguided multilateral aid policies, and environmentally insensitive private foreign investment. All these factors are relevant, but
focusing only any one of them is simplistic and misleading. Poverty cannot be an exclusive cause of environmental degradation since many poor countries practice successful resource conservation and rich countries use more resources and emit more wastes than poor ones. Rapid population growth undoubtedly depletes resources and threatens sustainable development, but when it is accompanied by misdirected policy measures it aggravates the situation. Foreign indebtedness may well be associated with pressures to export timber from tropical forests or to produce export crops that displace subsistence crops, which are subsequently grown on marginal lands. But indebtedness may itself be a symptom of misdirected economic policy. Structural adjustment lending by aid agencies has a mixed record of environmental impact, but no unitary evils can explain environmental degradation.60

It must, however, be mentioned that although the poor are generally seen as a cause of environmental degradation, they do not necessarily have short horizons. Poor communities often have strong ethic of stewardship in managing their traditional lands. There is evidence of environmentally sound ways in which the poor secured their livelihood. The poor adopt a variety of survival strategies to shield themselves from the effects of long-term stresses and unexpected shocks like droughts and floods. Depending upon their access to private and CPR, their specialised skills and socio-economic status, the rural poor could either (i) diversify/intensify their farming systems, (ii) combine farm and non-farm employment, (iii) migrate to urban areas, (vi) rely on mutual assistance, or (v) use of a combination of strategies.61 However, their fragile and limited resources, their poorly defined property rights, limited access to credit and insurance markets, and the policy and institutional environment in which poor households operate prevent them from investing as much as they should in environmental protection.

Hossain62 identified evidences of linkages among population, development and environment in Bangladesh. According to him strong linkages (both ways) exists between development status and environmental response.

There are at least two major issues related to population, environment and development. In the first instance, one can reasonably ask if population pressures have not added to the stresses on natural resources and prompted their overuse and a subsequent declines in the productivity of those resources, just at a time when increased demand for development and higher levels of

60 Perrings, n. 74, p. 6.
production has grown - thereby exacerbating the problem of overuse and depletion of a finite resource base. Secondly, are there not definite limits or at least natural resource related constraints to continued population growth and development?

In the first case, it is evident that the extremely high population density of Bangladesh has contributed to the intense use and overuse of forests, fisheries and to a certain extent even soil and water resources. A majority of households are already without sufficient areas of land to raise enough food to meet their needs. Fuelwood stocks have been depleted and diminished to the point where over 84 per cent of the total domestic energy requirements must be met by crop residues and dung. Particularly when one considers the projected population levels of the year 2000 and beyond, it does appear that population density has clearly outstripped the potential for sustained yield production of fuelwood for domestic energy consumption from existing sources of supply.

The same is true for fisheries, forests and other renewable resources: a condition of scarcity or shortages today does not necessarily imply that some absolute limit has been passed, and that the carrying capacity of the environment has been exceeded.

In Bangladesh, the current population pressures clearly argue for very careful assessment of the use of management of natural resources-primarily because so many people are already dependent on them. Similarly, the high density of population in Bangladesh requires careful examination of the relationship between people and the land, and a frequent re-assessment of the potential for more productive and equitable use and sharing of natural resources.

In Bangladesh, it is particularly unfortunate that so many should remain landless, and even without a homestead, when relatively large areas of “khas” lands and other expanses of degraded or moderately productive land are not intensively managed and utilised by government agencies which have jurisdiction over them. In fact, given the momentum of continued population growth, intensification of land use and resource management on degraded lands and under-utilised areas is essential if pressures to overuse and deplete other more intensively exploited areas are to be held in check.

In addition to population pressure, many analysts also point to the contribution of poverty to resource overuse and environmental degradation. Clearly, there is a relationship between poverty and environmental stresses; the poor are forced to address short-term needs, even if their
actions contribute to the long term depletion and degradation of resources. Poverty can also be seen to be a factor in continued high rates of population growth-owing to the associated lack of health care services, security, educational and employment opportunities.

The links between poverty, environment and development also argue for careful analysis of alternative means to alleviate poverty and promote development while safeguarding and even increasing the extent and productivity of natural resources which can be used and managed by the poor as they develop more sustainable and productive livelihoods. One of the basic prerequisites to poverty alleviation is empowerment, which also plays a crucial role in promoting sustainable rural development.

Empowerment for Sustainable Development

Empowerment through poverty alleviation is a principled strategy being followed by all the NGOs, irrespective of small and big, in Bangladesh. The existing trends have shown that in spite of decades of ‘development’ poverty level in Bangladesh continue to increase. The response to this apparent lack of development has attempted to reconceptualize development and focus on people as mediums and objects of development of poverty alleviation and sustainable human development goals.

To understand how empowerment might best serve poverty alleviation and sustainable development goals it is important to consider the mutual and dynamic interactions between social, political, cultural, economic and ecological factors which might be key in reproducing impoverishment process or reversing these processes towards sustainable patterns of living. The trigger towards impoverishment and unsustainable patterns of living might be both external such as discriminatory economic policies contributing to production distortions.

The trigger towards sustainable patterns of living might be increasing options to the poor by providing them with a true capacity to cope with a changing socio-ecological environment- the capacity to adapt and to be self-reliant, endogenously define goals, priorities, identity and values.  

Some of the necessary conditions for empowerment include:

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• Local self-reliance, autonomy in the decision-making of communities and direct participatory democracy;
• Provision of space for experimental social learning, the articulation and application of indigenous knowledge in conjunction with contemporary scientific knowledge;
• Access to entitlements over land and other resources, education for change and other basic needs;
• Capacity to achieve food self-sufficiency and sustain it;
• Access to income, assets and credit facilities and the capacity to create credit facilities;
• Access to knowledge and skills for the maintenance of constant natural capital stock and the environmental sink capacity;
• access to skills-training, problem solving techniques, best available appropriate technologies and information without which the knowledge and skills become virtually useless; and
• Participation in decision-making process by all people, and in particular women and youth.

Furthermore, empowerment embodies greater consciousness, group identity and practical realisation of the creative potential of the poor; reconstruction of group identity by upgrading the skills and knowledge base and assets of the poor as they become initiators of interventions; and participation by the poor exercising power for themselves through collective decisions, organisations and actions.64

Empowerment for sustainable development means giving to people and communities the true capacity to cope with the changing environment, for increased social awareness, higher levels of social and economic participation and the utilisation of new insights on ecological process of change and self-renewal; as societies and communities strive to enter the transition towards sustainable pattern of development.65

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65 Naresh and Vangile, n. 80.
1.1.2 PEOPLE'S PARTICIPATION AND SUSTAINABLE DEVELOPMENT

Participation, like sustainable development, has become an umbrella term for a new approach to development intervention. As a goal in itself, community participation is viewed by some as a necessity for individual and social well being; others see it as a basic need by itself of men and women. Such views are related with the perceived inadequacies of the new democratic nation states, where the newly forming political institutions usually by pass the poor and marginalized population. Therefore, giving voice to the people and increasing the levels of participation are seen as a necessary condition of development.

However, the breadth of meaning given to “participation” to date can be judged from the following list of definitions:

a. organised effort to increase control over resources and regulative institutions,
b. people’s involvement in decision-making, implementation, benefit-sharing and in evaluation of programmes,
c. people’s capacity to take initiative in development, to become “subjects” rather than “objects” of their own destiny, this can only be achieved through a “deprofessionalization” in all domains of life in order to make “ordinary people” responsible for their own well-being;
d. participation involves a reversal of role playing: people should be the primary actors and government agencies and outsiders should participate in people’s activities.

Cohen and Uphoff regarded participation as generally denoting the involvement of a significant number of persons in situations or actions, which enhance their well-being.

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73 Ivan Illich, Medical Nemesis, ( New York : Pantheon, 1976 )
Paul\textsuperscript{76} defined participation as, in the context of development, community participation refers to an active process whereby beneficiaries influence the direction and execution of development projects rather than merely receive a share of project benefit.

Santhanam et. al.\textsuperscript{77} defined participation as commitment on the part of the individual towards all forms of actions by which the individual can take part or play a role in the operation without being conscious of any socio-economic barriers to achieve certain common goals in a group of situation.

Lele\textsuperscript{78} after examining the nexus between the large number of factors and the capacity of the project to carry out the rural development tasks, concluded that Laval participation may mean involvement of people in planning, including assessment of local needs.

The ILO points out that participation involved active, collectively organised and continued efforts by the people themselves in setting goals, pooling resources together and taking actions which aim at improving the living conditions.\textsuperscript{79}

According to Banki\textsuperscript{80} participation means a dynamic group process in which all members of a group contribute, share or are influenced by the interchange of ideas and activities toward problem solving or decision-making.

To Singh\textsuperscript{81} people's participation requires, among other things, that the target group of people voluntarily spend their time, energy and money on the programme, adopt the recommended resource development measures and management practices and maintain them in good condition on a sustained basis.

There is no universally valid theory of people's participation in development programmes. Only sets of propositions stating the condition under which people participate and do not participate in collective action are available. Since all development programmes entail some collective action on the part of their target group, factors affecting collective action are also

\textsuperscript{79} Quoted in Cohen and Uphoff, n. 47.
\textsuperscript{80} Evan, S, Banki, Dictionary of Administration and Management, California Systems Research Institute, Los Angeles, 1981, p. 533.
relevant for people’s participation. In other words, determinants of peoples’ participation constitute a bigger set of which determinants of collective action are a subset.\textsuperscript{82}

Buchanon and Tullock\textsuperscript{83} while developing a theoretical approaches to collective action argues that people will participate in collective action when they are organised in small groups; when the expected private benefits from the collective action exceeded the expected private costs of participation; and when rules for preventing free riding and shirking and ensuring equitable sharing of benefit and costs of the collective action exist and are enforced and monitored by the people themselves.

Horowitz\textsuperscript{84} and Stadel\textsuperscript{85} argue that local people, confronted with issues will take a longer view of the problems in an integrated way than the distant government which afflicted with institutional and bureaucratic blinds are bound to take decisions on narrow and short range problems.

Daly and Cobb\textsuperscript{86} views that peoples’ participation as a necessity for individual and social being while Rahman\textsuperscript{87} sees it as a basic need by itself of men and women.

According to Chambers\textsuperscript{88} participation involves a reversal of role playing where people should be the primary actors and government agencies and outsiders should participate in peoples’ activities.

Uphoff\textsuperscript{89} while discussing strategy for participatory approach for promoting sustainable rural development says rural people has to be regarded as partners more than “beneficiaries” or “target groups”. The “target groups” strategy of NGOs in poverty alleviation and even treating them as beneficiaries has not helped the poor over the years to come out from the vicious circle of poverty trap.

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\textsuperscript{82} Ibid.
\textsuperscript{84} M. M. Horowitz, Anthropology and the New Development Agenda, Development Anthropology, Network, no. 6, 1988, p. 1-4.
\textsuperscript{86} Herman, E. Daly and J. B. Cobb, For the Common Good: redirecting the Economy Toward Community, The Environment and Sustainable Future, ( Boston : Beacon Press, 1989 ).
\textsuperscript{87} Rahman, op. cit., n. 39.
\textsuperscript{88} R. Chambers, Participatory Rural Appraisals : Past, Present and Future, FTP Newsletter, no. 15 / 16, 1992.
\end{flushright}
UNDP's 1993 Human Development Report says that more than 90 per cent of the global population are unable to exert a meaningful impact on economic, political and social functioning of societies they live in. It argued that giving voice to the people and increasing the levels of participation is necessary condition for development.

Uphoff\textsuperscript{90} puts that attaining sustained participation on top of all requires major political change and decentralisation. It requires management of resources at the local community level, not at the level of administrative bureaucracy, which is seen to engross with state-directed participation meant for co-operation, political mobilisation, or clientelism. In this regard he says what is needed first is participatory economic democracy, without which political democracy has no meaning for the poor and disenfranchised. The focus of participation should be on socio-economic empowerment through implementing land reforms, providing security of tenure, employment and support programmes, through expansion of educational opportunities in rural areas, and allowing NGOs to organise and mobilise the poor. The NGOs being committed to peoples' development can be a major actor in empowering peoples' participation in development activities.

While in the developing world, a diverse array of participatory models are already in practice and more and more are coming up in managing the natural resources, a universally accepted framework of the participation process has not yet really come in. This has been reflected in a World Bank Review Report\textsuperscript{91} wherein it says the principles guiding beneficiary participation in bank-financed projects have been quite abstract and of limited operational impact. Beneficiaries were not assigned a role in the decision making process, nor was their technological knowledge sought prior to designing project components.

The state intervention very often stands in the way of implementing development programmes where peoples' participation is also found place. As Khan\textsuperscript{92} says a top-down paternalism came into prominence in not gaining momentum of the concept of Joint Forest Management in Bangladesh. The same factor has contributed to putting JFM in West Bengal under stress even after a quarter of century. This called into question the state role and suggested


\textsuperscript{92} M. R. Khan, Social Dimension of Sustainable Development: An enquiry into the Forests sectors of Bangladesh and West Bengal.
for by passing the government to draw enhanced level of peoples’ participation in any development undertakings.

Based on state’s perception pertaining to what participation entails, or the degree to which it is willing to devolve power to local institutions Midgely\(^3\) presents four types of state responses:

a) The anti-participatory mode (peoples’ participatory initiatives are viewed by regimes as threats and are suppressed)

b) The manipulative mode (Participatory rhetoric is used by regimes for some ulterior motive)

c) The incremental mode (regimes officially support participation, but policies are vaguely formulated and incrementally implemented) and

d) The participatory mode (Regimes create machinery for effective involvement through the devolution).

Therefore, any participatory development project should be approached with questions of who participate, what kind of participation takes place. Brazilian sociologist and dependency theorist F H Cardoso\(^4\) argues that participation ought to be linked to political activity in broader arenas, and not confined to small-scale, problem solving efforts.

Attaining sustained participation thus requires major political change and decentralisation, not of administrative bureaucracy. Sustained participation calls for involvement of local community in managing resources. Some argues that what is needed first is participatory economic democracy, without which political democracy has no meaning for the poor and disenfranchised. It means that the focus should be on socio-economic empowerment through implementing land reforms, providing security of tenure, employment and support programmes through expansion of educational opportunities in rural areas, and allowing NGOs to organise and mobilise the poor. Once the poor are sensitised enough about their condition and mobilised as a group, they can exert their say in local and ultimately at national level decision-making.

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\(^3\) J . Midgely et al., *Community participation, Social development and the State*, (London: Methuen, 1986).

Etinne Berthet\textsuperscript{5} views that all human behaviour aims at satisfying a need or an aspiration, and people will only agree to change their habits when they are convinced that it will be to their advantage.

Participation tended to be defined either as participation by individuals or by groups, in economic, administrative or institution-building process, making their own decision which call for a redistribution of control over resources and changes in power patterns in favour of those who live off their labour. Thus, the central issue has to do with power exercised by individuals, groups and classes over a disadvantaged majority. Unequal power distribution is associated with socio-cultural values and ideologies legitimising social stratification and reflects unequal control over means of production and assets by a few. This concentration of power puts the cheap and obedient labour of the poor at the disposal of the monopolising class, giving the latter more power. In this regard Mathias Stiefel views that redistribution of power and resources should be the objective of people’s power\textsuperscript{6}

In the context of rural development participation as an encounter implies a sharing in the decision-making between social classes and interest groups, often leading to confrontation between the villagers, members of voluntary associations and rural elite and resource holders. Every rural development activity dealing with the participation should include the following components:

- Participation in decision-making
- Participation in implementation
- Participation in benefits
- Participation in evaluation

The idea of people’s participation in development means developing the potential of the hitherto neglected rural poor, enabling them to make decision for their own welfare. This approach is nearest to the type of people’s participation practice being followed by NGOs in a fragmented Bangladesh society.

\textsuperscript{5} Etinne. Berthet, \textit{The Fight Against Famine} , World Health, December 1980, p. 27.

It is everywhere where the rural societies are not homogenous structures. The existence of contradictions among different social classes and groups having conflicting interests is a fundamental fact of village life. Moreover, the poor themselves are often not a homogenous category, differentiated and divided as they are on many issues and competing with each other for the limited economic opportunities in the village. These factors inhibit the poor from taking initiatives on their own to improve their lot through organised group efforts. Dependency attitudes and lack of unity have made the poor non-innovative and non-experimental, thereby reinforcing their dependency relationships. This explains why it is difficult, if not impossible, for participatory rural development to be a spontaneously generated process.

At this backdrop an external intervention by NGOs is more often than not a necessary initial input in the generation of participatory rural development. The NGOs as an intervenor helps to investigate, analyse, and understand the reality of village life, in particular the forces causing poverty in the rural scenario. The intervenor through a process of awareness creation, of conscientization mobilises people into self-reliant action. The intervenor’s role is essentially the catalytic one of helping people raise their level of consciousness by carrying out a searching investigation of village life, probing deeper into the village reality, and thereby seeking ways of breaking out the vicious cycle of poverty.

Apart from poverty alleviation the NGOs in Bangladesh has of late started to put emphasis on the rural resources generation as a part of their strategy to generate incomes for the target group. The experimentation with poverty focused rural development by the NGOs though made some progress in containing the rural poverty in real sense it did not make any headway. This has been aptly reflected in the deteriorating rural resources scenario. This calls for adopting new strategy to be followed by the Government and NGOs in generating man made natural resources and ensure access of the stakeholders in the resources management.

1.1.3 COMMON PROPERTY RESOURCES AND SUSTAINABLE DEVELOPMENT

Like peoples participation Common Property resources (CPR) play a crucial role in sustainable rural development. In the rural areas in most of the third world countries the grass land, marginal land water bodies watershed drainage, river beds, river and unclassified forests are traditionally been used by the poor people as common property resources (CPR).
The extent of CPR as a proportion of total assets in a community varies greatly across ecological zones. In India they appear to be most prominent in arid regions, mountain regions and unirrigated areas. They are least prominent in humid regions and river valleys. The income inequalities are less where CPR is more prominent. It is also argued that dependence on CPR falls with rising wealth across households. To Dasgupta the links between undernourishment, destitution, and erosion of the rural CPR base are close and subtle.

Common property resources also provide the rural poor with partial protection in times of unusual economic stress at their disposal. For landless people they may be the only non-human assets at their disposal. It is increasingly recognised that one of the important characteristics of the poor is that he or she is likely to spend substantial household time on common property resource activities. The linkage between poverty and environmental degradation is more prominently visible with respect to CPR, which are subjected to individual use but not to individual possession, rendering them highly prone to over-exploitation, degradation and misuse by their co-users.

The erosion of common property resource bases can come about in the wake of shifting populations, rising populations and the consequent pressure on these resources, technological progress, unreflective public policies, predatory governments, and thieving aristocracies. There is now an accumulation of evidence on this range of causes.

In his work on the drylands of India, Jodha noted a decline in the geographical area covering common property resources ranging from 26-63 per cent over a twenty-year period. This was in part due to the privatisation of land, a good deal of which in his sample had been awarded to the non-poor. He also noted a decline in the productivity of CPR on account of population growth among the user community. In an earlier work, Jodha identified an increase in subsistence requirements of the farming community and a rise in the profitability of land from cropping and grazing as a central reason to desertification in the state of Rajasthan. He argued

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100 N.S., Jodha, Common Property Resources and Rural Poor in Dry Regions of India, Economic and Political Weekly, no. 27, July 5, 1986.
101 N.S. Jodha, Common Property Resources and the Rural Poor, Economic and Political Weekly, no. 27, July 5, 1986.
that, ironically, it was government land reform programmes in this area, unaccompanied by investment in improving the production base that had triggered the process.

In the face of what has been called the "tragedy of commons"\textsuperscript{103}, the rural poor, who depend to a large extent on CPR, have been gradually gaining less access to the sources of their livelihoods. As mentioned earlier this is mainly due to transformation of CPR into private resources. Noronha\textsuperscript{104} observes that privatisation of village commons and forestlands, while hallowed at the altar of efficiency, can have disastrous distributional consequences, disfranchising entire class of people from economic citizenship. He also views that public ownership of such resources as forestlands is by no means necessarily a good basis for a resource allocation mechanism. In this regard he blamed the decision-makers by saying that they have little knowledge of the ecology of such matters and they are in many instances overly influenced by interest groups far removed from the resource in question.

The CPR also called as natural resources plays an important role in the context of livelihood of the rural poor in Bangladesh. No empirical study so far made on the actual involvement of the rural poor in sustaining their livelihoods from the common property resources abounding in the country. Only recently, a CIRDAP\textsuperscript{105} sponsored study on four agro-ecological zones revealed that 15, 13 and 8 per cent of the households gathered fruits and vegetables from common property sources in peat, terrace and hilly areas respectively. The study made interesting revelations that bottom income groups poor in the hill agro-ecological zone depend totally on the CPR for their fuel wood.

1.1.4 Sustainable Development and Natural Resources Management

Sustainable development and effective management of natural resources and rehabilitation of degraded ecosystems is all closely interlinked with one another. Ecological issues are tied up with social, economic, anthropological and cultural dimensions with obvious trade-offs. Hare, et. al\textsuperscript{106} put forward the following guiding principles for ecologically sustainable resource management:

\textsuperscript{103} G. Hardin, the Tragedy of the Commons, Science, Vol. 162, 1968.
\textsuperscript{105} CIRDAP, Environmental and Ecological Aspects of poverty and Implications for sustainable Development in Bangladesh, MAP Focus Study Series No. 3, December 1994.
\textsuperscript{106} Hare, W. L, Marlowe, J. P, Rae, M. L, Gray et. al., Ecologically Sustainable Development, (Victoria: Australian Conservation Foundation).
- Inter-generational equity: providing for today while retaining resources and options for tomorrow.
- Conservation of cultural and biological diversity and ecological integrity.
- Constant natural capital and sustainable income
- Anticipatory and precautionary policy approach to resource use.
- Resource use in a manner that contributes to equity and social justice while avoiding social disruptions
- Limits on natural resource use within the capacity of the environment to supply renewable resources and assimilate wastes.
- Qualitative rather than quantitative development of human well being.
- Pricing of environmental values and natural resources to cover full environmental and social costs.
- Global rather than regional or national perspective of environmental issues.
- Efficiency of resource use by all societies.
- Strong community participation in policy and practice in the process of transition to an ecologically sustainable society.

This implies the need for making a series of compromises to achieve sustainable development in such a way that the ultimate track is not lost to achieve the objective.

Ramakrishnan et al.¹⁰⁷ view that an ecosystem type may be the appropriate unit for convenient handling of the issues involved in sustainable management of natural resources. They may be (a) man-made ecosystem: such as agriculture, a fishpond in a village or the village itself as an ecosystem or (b) natural ecosystems: such as grassland, forest, river etc. A cluster of interacting ecosystem types, i.e., a landscape (e.g., watershed) may be the most effective for a holistic treatment.

Huntley et al.¹⁰⁸ and Ramakrishnan¹⁰⁹ opine that monitoring and evaluation of sustainable development calls for using a number of diverse currencies which may be as follows:

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a. ecological (land use changes, biomass quality and quantity, water quality and quantity, soil fertility and energy efficiency)

b. economic (monetary input/output analysis, asset accumulation or capital savings and dependency ratio)

c. social (quality of life with more easily measurable indicators such as health and hygiene, nutrition, food security, morbidity symptoms; the difficult to quantify measures such as societal empowerment, social and cultural values).

Development concerns in the ecologically degraded areas usually revolve around as to how could the resources of a region be managed for conserving/improving the environmental values of the region together with socio-economic development of the peoples of that particular locality. Linkages between ecological and socio-economic approaches ensure that development is made location specific. While conservation of natural resources figures as top priority on the agenda of environmentalists, possible ways of building upon the economic potential linked to infrastructural development, and advanced technology, increased cash flow through a well developed market economy are the primary concerns of the deprived and desperate rural people. Sustainable management of natural resources is possible neither by asserting power by enforcing laws by the state in the name of wider public interest nor by giving free hand to the people to decide the balance between use of natural resources for the present and the future and or for themselves and others.

Eckholm, Repetto and Holmes while discussing natural resources management in the rural areas have noted that isolated low-income rural communities have managed their renewable natural resources in a sustainable way until exposed to outside pressures. Such pressures have typically led to changes in demands on the resource base, but have not been accompanied by necessary technological changes to raise sustainable yields to meet the increased demands.

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Marx\textsuperscript{113} maintains that traditional rural production systems were successfully adapted to substantial variability in their local environments. Given the uncertainty in access to local water and pasturage sustainable cultivation and grazing practices involved diversification, buffer stocks, and access to large enough land areas to balance out local variations in forage quality. Some systems permit fairly large populations to exploit marginal lands that most likely would remain unproductive otherwise. In addition, such systems are likely to represent more productive adaptations to difficult environments than modern monoculture technologies, if the objective were sustainable yields. Such practices reflect rational economic behaviour and efficient resource use, given the various constraints facing the cultivators.

Repetto and Holmes\textsuperscript{114} views that many traditional systems have been able to accommodate moderate population growth through intensification of agriculture such as terracing, irrigation, crop rotation and fertilisation. Stall feeding of animals, tree planting, and ridging of fields are practices adopted near settlements to combat soil erosion.

Ciricacy-Wantrup and Bishop\textsuperscript{115} in their study on the natural resources use in isolated low-income rural communities find that these societies have evolved the social mechanisms over the years where access to the resource base for the members of the local community were made limited. In this way they maintained internal control over the use of the resource base. The authors also maintains that when exposed to and gradually giving in to outside pressure and exposure, so-called open access conditions emerge, and this lead to depletion of the resource stock, unless the demands were small.

McKean\textsuperscript{116} in his findings on the Japanese village communities documented that even under local demand pressure, most communal management systems were successful in using fragile and natural environments in a sustainable way.

Commercialisation can convert a local community sustaining a limited and inelastic local subsistence demand into a virtual unlimited and elastic demand from outside the rural community. This can lead to rates of harvesting and resource extraction way above those implied

\textsuperscript{114} Repetto and Holmes, n. 109.
\textsuperscript{115} S.V. Ciricacy-Wantrup and R. Bishop, "Common Property as a Concept in Natural Resources Policy", Natural Resources Journal, 15: 713-27.
by local population growth, and unless part of the revenues from such extractive activities are invested in order to compensate for and counter resource losses, a short term gain has been acquired at the expense of the future welfare. A gradual breakdown of traditional sustainable common property management systems will occur, and the community becomes very vulnerable to the dangers of an open access community.

The approach to natural resources management is holistic because it recognises that an ecosystem is more than simply the sum of its parts. It is a functioning whole, which is a self-regenerating system, if it is not subjected to too much stress and as long as its capacities of resiliency and adaptability are maintained. The ecosystem provides environmental services, such as local climatic and hydrological regulation in the case of forests. It is also a habitat for populations of humans and other species as a space, life support system, and context. It is also a reservoir of biological diversity and germ plasm for future evolution as well as biotechnology such as genetic engineering. In these and other ways the ecosystem is much more than just an inventory of natural resources; this is one of the reasons that the sustainable harvesting of resources should rely on the "natural interest" rather than the "natural capital" of ecosystems.

In view of promoting sustainable rural development the essential prerequisite is to involve the women in the task of maintaining ecological integrity and ensure management of natural resources for the posterity and the existing human generation.

1.1.5 Women and Sustainable Development

The links between environmental degradation and an accentuation of deprivation and hardship can take forms that even today are not always appreciated. The gathering of the fuelwood and fodder, and the fetching of water for domestic use in most rural communities fall upon women and the children as well. When allied to household chores and their farming obligations, the workload of women in south Asia in terms of time is often one-and-half to two-

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and-a-half times that of a man. This workload has over the years increased directly as a consequence of receding resources.

Rural women in the developing countries play a major role in managing natural resources like soil, water, forests and energy. Their tasks in agriculture and animal husbandry as well as in the household make them daily managers of the living environment. They have profound knowledge of plants, animals and ecological processes around them. As farmers and traders, women come across environmental problems, which undermines the basis of their daily life. Women in some parts of the world work for fifteen to sixteen hours a day during the busy agricultural season.

Communities in the drylands of the Indian sub-continent and in the sub-Saharan Africa today often lives miles away from fuelwood and fodder sources, and permanent water sources. In these part women apart from doing their daily household chores has to spend five hours a day to collect water during the dry season. The consequence is that anything between 10 and 25 per cent of daily daytime energy expenditure is required for the purposes of collecting water.

So any degradation of environment is bound to create negative impact on the whole population, especially on women and children. Women suffer more but they have little say on the protection of environment. The development planners and policy makers do not consider how development will affect the poor and landless people specially the women.

Of late, environmentalists have realised how the degradation of nature may have catastrophic effect on the world and the key role woman can play in protecting the nature. Development planners have realised the importance of listening to the grass-roots rural women, who depend on nature for their livelihoods and who have the first hand knowledge on the degradation of environment and its effect on them.

There have been several studies on women and natural resources, which include women and fuelwood crisis, women and forest and women’s relationship to common property

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124 Dasgupta, n. 113.
resources. The majority of early studies focused on the consequences of deforestation on women, but recent studies elucidate a more holistic picture, which describes the range of products women collect from nature and women’s roles and responsibilities in regard to these products. Studies also found that natural resources are central to the livelihoods of poor rural households in developing countries and women are the primary collectors and managers of biomass goods in rural households.

Given the women’s acknowledged role as an ecological resource development manager, the rural landless women if could be actively involved by the NGOs in the natural resource management particularly in management of the ecological resources sustainable development for rural areas can be achieved.

1.2 Sustainable Rural Development

The Role of NGOs in sustainable rural development in the context of Bangladesh has to be viewed in a proper perspective. The paradigms of rural development so far being followed are absolutely growth-oriented. In the rural society where distribution of natural resource especially the ownership on land is highly skewed there has been a phenomenal increase in poverty and degradation of rural resources leading to fragile ecosystem.

The role of NGOs in rural development is assuming importance because of their special qualities, like innovativeness, commitment among workers for effective implementation, flexibility in approach to suit local conditions, close contacts with local people, high level of motivation, minimum procedural practices, which are known to be missing among government functionaries.

In most of the rural development programmes lack of people’s participation in development programmes has been identified as one of the major causes of failure to ensure development in the rural areas. In this regard it is sometimes argued that NGOs are in a better position to carry forward development programmes. In view of perpetual failure of government

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Agencies in the third world countries to bring any perceptible change in the rural scenario it is widely accepted that in spite of several limitations, involvement of NGOs in the process of rural development has become essential, due to government's inherent limitations in reaching the rural poor. Some argued that involvement of NGOs in the process of rural development might be a suitable option for successful implementation of various poverty alleviation programmes.\footnote{Udaya Bhaskar Reddy, Role of Voluntary Agencies in Rural Development, The Indian Journal of Public Administration, Vol. 33, no. 3, July-September 1987.}

NGO action in Bangladesh supplements government efforts in rural development in many significant ways. It enlarges the scope of rural development plan by independently formulating its own activities, based on its own perception of rural needs. It has been time tested that NGOs are better suited to devote their efforts to foster steady growth in the rural areas. Besides there are always some areas of works where the career bureaucracy has set examples of repeated failures.

Given that the bureaucracy in Bangladesh has been decentralised over one and half decades ago and given that the second, third, fourth and fifth Five Years Plan of Bangladesh pledged to alleviate rural poverty the outcome in real terms is devastatingly frustrating. Government failure in these areas has drawn strong criticism from time to time from the academia and conscious sections of the society. The NGOs actively engaged in rural development scenario has also voiced concern over the failure to contain poverty in the rural areas.

In fact the challenge now the country faces in the rural areas has its roots in the development model itself. It has created problems of displacement, ecology, environment, deforestation, poverty and unemployment etc. The pronounced goal of the development was to create an egalitarian social order based on values of equality, freedom and justice. But this has been totally belied as poverty and disparities have grown many-fold despite economic growth.

With the rise of population growth vis-à-vis degeneration of natural resources leading to a near collapse of village ecosystem in some parts of the country new demands are being mounted by the rural community which calls for reorientation of NGO activities. The future will compel the NGOs to become more and more professional, and the trend towards this has already triggered itself.
The NGO sector is a mixed bag of groups and individuals of different size, ideologies, areas of concern, funding sources and effectivity. With in the environmental sector, the first problem is that of lack of expertise and understanding. Ecological science is of recent origin and there are overall lacunae of scholarship and understanding.

Rural Development does not mean mere agricultural growth. In rural development all aspects of rural life are inter-related and no lasting results can be achieved if individual aspects are dealt with in isolation. Development involves the introduction of new ideas into a social system in order to produce higher per capita income and level of living through modern production methods and improved social organisations.\textsuperscript{132}

Norman and Uphoff\textsuperscript{133} suggest that successful performance of extended rural development require organisation, participation and mobilisation at the local level in conjunction with the resources services and the policies of the government. They also argue that the success of a strategy of rural development requires support from the national political environments.\textsuperscript{134}

While some equated rural development only with agriculture development a group of scholars replaced it with new terminology ‘Integrated Rural Development’\textsuperscript{135} \textsuperscript{136} \textsuperscript{137} Whang\textsuperscript{138} views it as a package programme of various rural development services and activities of the government, with emphasis on horizontal and vertical integration.

Although the term ‘integrated rural development’ is open to different interpretations, the basic intention is to bias development in favour of the rural areas.\textsuperscript{139} \textsuperscript{140} \textsuperscript{141} To Ruttan\textsuperscript{142} integrated rural development is an ideology in search of a methodology or a technology. To the rural development practitioners the phrase IRD is not an “umbrella” term with a fixed or standard

\textsuperscript{132} P. Oakley and C Garforth, \textit{Guide to Extension Training}, Food and Agriculture organisation (FAO), Rome, 1985, p. 1
\textsuperscript{133} Norman, Uphoff, \textit{Training and Research for Extended Rural development in Asia}, Cornell University, Ithaca, New York, 1974, p. 3
\textsuperscript{134} ibid. p. 40.
\textsuperscript{135} P. Oakley and C. Garforth, op. cit., n. 73.
\textsuperscript{140} R. Chamber, \textit{Rural Development - Putting the Last First}, (London : Longman, 1983).
recipe for rural development. It is commonly used to indicate a multipurpose thrust of rural development.\textsuperscript{143}

The World Bank's\textsuperscript{144} interpretation of rural development adheres to a strategy designed to improve the economic and social life of a specific group of people - the rural poor.

Uma Lele\textsuperscript{145} finds rural development as a means of improving the living standards of the masses of the rural low-income population and making their development process self-sustaining. While Mosher\textsuperscript{146} focuses on changes in technologies, organisations, activities and values. He also argues for evolving effective means to deal with conflicts, the capacity to strike a balance between individual opportunities and corporate needs of a community and the expansion of agricultural production, without irreparable damage to the ecosystem.

Johnston and Clark\textsuperscript{147} consider rural development as specific interventions in three key programme areas: production oriented interventions for expanding rural employment opportunities and agricultural development; consumption oriented interventions dealing with health, nutrition and family planning; and organisation oriented interventions dealing with institutional structures.

Lea and Chaudhuri\textsuperscript{148} argue that rural development involves situations where planning objectives encompass some or all of the following interrelated attributes:

1. To improve the living standards or well being of the mass of the people by ensuring that they have security and that their basic needs are met;
2. To make rural areas more productive and less vulnerable to natural hazards, poverty and exploitation and to give them a mutually beneficial relationship with other parts of the national, regional and national economy;
3. To ensure that any development is self-sustaining and involves the mass of the people in planning and implementation;
4. To ensure as much as local autonomy and as little disruption to traditional customs as possible.
Rural Development no longer remains solely concerned with agriculture but with all aspects of rural resources, society and economy. As the World Bank \(^{149}\) puts it “Rural development recognises, however, that improved food supplies and nutrition, together with basic services such as health and education, can not only directly improve the physical well being and quality of life of the rural poor, but can also indirectly enhance their productivity and their ability to contribute to the national economy. It is concerned with the modernisation and magnetisation of rural society and with its transition from traditional isolation to integration with the national economy.

While literatures on sustainable development are abounding the literature on sustainable rural development is very scanty. Only recently the concept came into the forefront with more and more studies found the degeneration of natural resources in the rural areas despite the integrated rural development approach are followed. This led to put a question mark on the very essence of IRDP for being failed to stop degeneration of rural resources. The Rio summit is an eye opener in this regard. It called for environmentally sustainable rural development programmes by the government and non-government agencies. Given this backdrop a paradigm shift in rural development undertaking is seriously felt for the developing countries.

Mujeri\(^{150}\) says sustainable rural development planning should concentrate on natural resources base with focus on land, water, forests/biodiversity and renewable energy sources. He also argues that within the sustainability framework, rural development planning goals at the village level need to focus on sustainable livelihood security, equity, environmental regeneration, forest protection and afforestation.

The success of sustainable rural development depends how best and efficiently natural resources are managed with people's participation. Sustainable rural development and effective management of natural resources and indeed rehabilitation of degraded rural ecosystems are all closely inter-linked with one another. Ecological issues are tied up with social, economic, anthropological and cultural dimensions. The guiding principles of Sustainable Rural Development as Hare\(^{151}\) views are:

\(^{148}\) D. A. M. Lea and D. P. Choudhuri, op. cit.
\(^{149}\) World Bank, op. cit., n. 85.
• Conservation of cultural and biological diversity and ecological integrity;
• Resource use in a manner that contributes to equity and social justice while avoiding social disruptions;
• Limits on natural resource use within the capacity of the environment to supply renewable resources and assimilate wastes;
• Constant natural capital and sustainable income;
• Prices of environmental values and natural resources to cover full environmental and social costs;
• Qualitative rather than quantitative development of human well being;
• Strong community participation in policy and practice in the process of transition to an ecologically sustainable society.

Ramakrishnan\textsuperscript{152} points out that indicators of sustainable rural development are varied and this may require that a diverse set of measures and parameters are used in the monitoring and evaluation of:

- ecological parameters (land use changes, biomass quality and quantity, soil fertility and energy efficiency),
- economic parameters (monetary output/input analysis, capital savings or asset accumulation and dependency ratio)
- social parameters (quality of life which includes health and hygiene, nutrition, food security, morbidity)

In addition to the above parameters he emphasises that institutional arrangements have to ensure peoples' participation, through bottom-up approach which ensures that each household takes part in the decision making process at the lowest level in the hierarchy, and with special dispensations for the weaker and more vulnerable sections of the society.

Given the context that the agriculture, forestry and fisheries are traditional activities in the rural environment of the Asian tropics Ramakrishnan\textsuperscript{152} underscores for reconciliation the needs of the vast majority of human population with the sustainable utilisation of natural


\textsuperscript{153} P.S. Ramakrishnan, Shifting agriculture and Sustainable Development: An Interdisciplinary Study from North-Eastern India, (New Delhi: Oxford University Press, 1993).
resources. While referring to ecosystem rehabilitation and the sustainable management of natural resources in the rural set up he argues for handling rehabilitation on the basis of cluster (a 'landscape') of interacting ecosystem types.

To Ramakrishnan resources in a rural ecosystem are of three types: private, common and public. The community as a whole owns common resources, whereas public resources could be either exclusively under the control of the government. While a landscape may be an appropriate spatial unit for rehabilitation, the nature of access to resources by different sections of the community may be crucial in designing strategies for sustainable rural development. Given the backdrop ecosystem rehabilitation in the rural landscape is seen by him as a complex exercise involving three major interacting issues (ecological, socio-economic and institutional), with a number of subtending sub-issues. He opines that the institutional frameworks presently available in most of the countries in Asia are often not geared to integrate the varied dimensions and to take the holistic approach to natural resource enhancement and management.

To understand the dynamics of sustainable rural development in a rural set up the village as a basic unit of development needs to be understood from the ecological perspective. As the core intention of present study revolves round the sustainable rural development an effort will be made to interpret the village ecosystem and its sub systems in light of the Agro-ecosystem concept formulated by Cohen is presented below:

Village ecosystem

Conceptually a village ecosystem consists of the predominant man made ecosystems like agriculture, animal husbandry, homestead forestry and fishery. It also includes the built ecosystems comprising roads, buildings, houses, canals, bridges, culverts etc. Contrary to natural ecosystem like forests, waters body, grassland and wetland and so on the components of village ecosystem for all practical purposes are man-made. It is also called renewable ecosystem. The activities of the rural people revolve round all the subsystems as stated above. In rural society the land poor and landless do not have unhindered access over natural resources like land and water and forests. So what they do is to concentrate their activities on the nature for their livelihood. Basically their activities rests on biomass. The oft-cited articulations by the economists about the

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poor countries that they are for the most part biomass-based subsistence economies\textsuperscript{155} where the rural folk eke out a living from products obtained directly from plants and animals. So, in a country where a vast majority of people live in rural areas the functioning of the village ecosystem and its sub systems need to be uphold and integrity of the systems need to be maintained to ensure carrying capacity of the village as a whole.

Like the natural ecosystems the quality of the village ecosystems and its subsystems could be judged by the following characteristics:

- complexity
- stability
- diversity
- resilience

If any of the characteristics are weakened or jeopardised, the ecosystem is bound to collapse. As mentioned earlier that the village ecosystem is man-made ecosystem it may not be possible to apply the same principle applicable to natural ecosystem to reach the climax. But a society must put into its best efforts using the principles of sustainability to enable the system to met continued demand of the present generation. Given Bangladesh's overwhelming majority of the people living in rural areas, given its high incidence of poverty apart from government efforts the NGOs could play a crucial role in maintaining the ecological integrity of the village ecosystem and its sub systems through their operations in the rural society for the present generation and the posterity.

1.3 Non-Government Organisations (NGOs)

Taken literally the term "NGOs" may be used to include any institution or organisation outside the Government may include political parties, private and commercial enterprises, academic institutions, youth organisations, even sports clubs, etc.\textsuperscript{156} But, these are not the institutions which should be referred to by the terminology NGO. In fact, the terminology includes all those organisations, which are involved in various development activities with the objective of alleviating poverty of the rural and urban poor. Such organisations are generally termed as "Development NGOs" to differentiate them from other private organisations. The

NGO, as in Bangladesh, is used to refer those organisations and institutions that are registered with the Government under the Voluntary Social Welfare Agencies (Registration and Control) Ordinance of 1961 and the Foreign Donation (Voluntary Activities) Regulation Ordinance of 1978 and the Foreign Contributions (Regulation) Ordinance, 1982 and rules thereunder.\footnote{Report of the Task Forces on Bangladesh Development Strategies for the 1990's, Vol. 2. (Dhaka: The University Press Limited, 1991), p. 370.}

To outsiders, Development NGOs may be seen as a homogenous and monolithic, but this is far from being true. In reality these NGOs are diverse and plural in their approaches, strategies, sectoral programme components and interventions. However, there has been a gradual convergence of understanding among NGOs, of the dynamics of poverty and needed strategic interventions towards addressing it. Most of these NGOs hold the view that alleviation of poverty is only possible through developing organisations of the poor at the grassroots; empowering the poor through education and conscientisation, and ensuring their participation in all the phases of the development processes ranging from planning and decision making to management and implementation.\footnote{Guides to NGOs in Bangladesh, President's Secretariat, Dhaka, Bangladesh, June 16, 1990.} In fact, the role of a development NGO is primarily that of a catalyst making sustained interventions to promote self-directing, self-financing, locally accountable institutions and the process of people-centred development at the grassroots.

The term “non-government organisation” is a negative definition, not government. NGOs are similar to government agencies to the extent that they both are mandated to serve the public interest in lieu of private profit. Unlike the government, the same procedures and responsibilities do not bind NGOs. They use their freedom to create new approaches to solving problems, to initiate innovative, experimental programmes, to introduce new ideas, and to challenge old ideas and structure, which do not seem to be promoting equitable and productive society.

Definitions of Non Government Organisations (NGOs) have assumed different forms from different perspectives, over a period of time. Sociologically, NGOs are defined as a “group of persons organised on the basis of voluntary membership without state control for the furtherance of some common interests of its members”\footnote{M.A. Multalib, Voluntarism and Development: Theoretical Perspectives. Indian Journal of Public Administration, 33(33) 399-419.}
Korten classified NGOs into three generations on the basis of their distinctive orientations in programming strategy. These are 1) Generation-1: Relief and welfare, 2) Generation-2: Community Development; and 3) Generation-3: Sustainable Systems Development.

In the first generation, relief and welfare-oriented activities predominate among NGOs with the strategic orientation focused on alleviating the immediate consequences of poverty on a temporary basis. Given the fact that their support is dependent on external financing, it is likely to be unsustainable. And since such intervention only promotes the dependence of their beneficiaries, NGOs following such strategies are considered by him anti-developmental.

In the second generation, NGOs transforms themselves into development organisations with the commitment of developing the community to promote local self-reliance through provision of necessary support services. But it does not yield any fruitful results.

In the third generation, NGOs find themselves engaged in achieving necessary institutional and policy changes in favour of greater local control and initiatives. Such NGOs replace their service-delivery role by a catalytic one, facilitating development by other organisations, both private and public, of the capacities, linkages and commitments required addressing their designated needs on a sustained basis. He, however, suggests that matured NGOs can be accommodative of all these three organisations, thus placing themselves in all generations simultaneously.

NGOs are diverse, and proliferates in types and numbers. They cover a spectrum from long-established, major international and national institutions to fragile, local operations with no staff or guaranteed funding. They may work on single issues, or broad based development concerns. Almost all operate through organising groups of people to make better use of their own resources.

The United Nations uses a broad definition of NGOs, to include non-profit organisations in the private sector, academic and research organisations and local government. This broader scope is reflected in the term much used by Agenda21: the ‘major groups’ or the ‘independent

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sectors. NGOs are also known as the ‘third sector’ in contrast to the government and business sectors.

The Association of Development Agencies in Bangladesh (ADAB), an apex body of NGOs, while adopting code of ethics for NGOs renamed the development NGOs as Private Voluntary Development Organisations (PVDOs). It maintains that there are many kinds of organisations which are non-government ranging from clubs to commercial enterprises. PVDOs are non-profit organisations committed to the development of the underprivileged and the underserved.

NGOs also called as voluntary organisations (VOs) and the definition of which have assumed different forms from different perspectives, over a period of time. Some defines it as an organisation formed by a group of persons organised on the basis of voluntary membership without state control for the furtherance of some common interests of its members.\textsuperscript{162} While from the administrative viewpoint some argue that any agency registered under one of the Acts as a non-profit making body is considered as voluntary organisation.\textsuperscript{163}

One school of thought holds the view that NGOs have the capacity to displace the government, which is not considered capable of social change or sufficiently committed to the eradication of poverty as the main vehicle for promoting grassroots development.\textsuperscript{164} Abed and Chowdhury\textsuperscript{165} while advocating the existence of VOs or NGOs as development partner argue that the elite have become dysfunctional. The political elite does not favour mass movements to work or to raise consciousness of the people; industrial elite does not create new jobs or increase production; and bureaucrats do not deliver their services to the people.

Chowdhury\textsuperscript{166} defines NGOs as an organisational entity set up by a group of persons on their own initiative or partly by an outside motivation to help the people of a locality to undertake activities in a self-reliant manner to satisfy needs and also bring them and the public sector extension service closer to one another for more equitable and effective development of the various sections of the rural poor.

Types of NGOs

In terms of stages of development some seeks to classify voluntary organisations into three groups, which are: social welfarism, radical nationalism, and socialist revolution. Another classification goes further by categorising the NGOs into four groups which are: charity-philanthropic relief type; development charity mixed type; Gandhian or inspired by one dominant ideology type; and developmental-action group type.

All these classifications, though attempt to understand voluntary organisations suffer from usual drawback of creation of mutually exclusive categories. Perhaps this is inevitable because of complexity of differences among voluntary agencies.

The predominant common feature of these classification exercises is to divide Non-Government Organisations based on approaches followed by them with regard to voluntary action. Thus, welfare, development and social transformation emerge as three major orientations.

NGOs that are welfare oriented have been one of the oldest types whose functions include relief measures and other philanthropic activities. There is a tendency at present to consider them as inconsequential largely due to the shift in focus towards development activities.

According to Bhattacharjee there are two types of NGOs. One set of agency deal with the implementation of government sponsored programmes without modifications and is largely termed as conformists; and the other set innovates new schemes and implementation mechanisms and also believes in experimental mode. While the conformists largely depend upon the government for funding and maintain close liaison with the government, the innovators largely keep a distance from the government. They either get their money from foreign sources or from private sources internally or generate their own fund by selling the services or products.

Shah and Chaturvedi have made differentiation on the basis of approaches followed by NGOs. They have divided NGOs into three categories: techno-managerial, reformist, and...
radical. The techno-managerial NGOs which work on the premise that the process of rural development can be accelerated through modern management techniques and technology. The reformist NGOs, which try to bring about changes in the social and economic relationships within the existing political framework, and the radical NGOs which seek to challenge the existing production relations. They try to organise the exploited against the exploiters by undertaking some programmes in health education and economic sector as an entry point to mobilise masses for political action.

Krishna\textsuperscript{172} opines that NGOs are superior to official agencies on four counts: 1) NGO workers can be more sincerely devoted task of reducing the sufferings of the poor than government staff; 2) NGOs have a better rapport with the rural poor than the government employee; and 3) Since they are not bound by rigid bureaucratic rules and procedures, they can operate with greater flexibility, 4) NGOs can readjust their activity quickly and continuously as they learn from the experiences.

Panda\textsuperscript{173} while pointing out the advantages have the NGOs over government in transforming the traditional societies says the government agencies guided by rules and regulations works through officials concerned with statistics rather than psyche, receptivity, values, beliefs, expectations of the people, and follow-ups to continue the transformation process. He opines that these tasks could be well achieved by the NGOs.

It has been traditionally experienced that state bureaucracy wants to extend its long arm in the activities of the NGOs, which ultimately gives rise to a group of NGOs dependent on the government in some or other ways. This sometime frustrates and weakens the NGOs to deliver the goods. Inamdar\textsuperscript{174} while citing Indian examples says a few organisations of the conformist type have also achieved success by following the state sponsored schemes and intervention strategies. Contrary to this view Krishna\textsuperscript{175} views that these organisations not only depend excessively upon the government for funding but also gets instructions from officials on what is to be done and the way to be done in the field. As a result, even if some of these NGOs want to change the programme content and innovate, they cannot. This brings in the constraint of improving performance beyond certain levels. NGOs, which belong to the category of conformist

\textsuperscript{172}Raj Krishna, "It would be a futile exercise", Yoajana, vol. 28, no. 20 - 21, November 1984, p. 7.
\textsuperscript{174}N. R. Inamdar, Role of Voluntarism in development, Mainstream, 33 (3), 1987, p. 420 - 32.
\textsuperscript{175}Krishna, op. cit.
and non-performers, are simply patronised by the government and often cited as examples to stress the need for greater controls on NGOs.\textsuperscript{176}

There has been a division of opinions as to whether the NGOs have any impacts in real terms. One school of thoughts holds opinions that they have humanising effects on the otherwise dehumanised bureaucracy.\textsuperscript{177 178 179 180} Another school of thoughts strongly critical of NGO activities argues that they have no role to play. Most left ideologues and theoreticians, as in India, are in against giving encouragement to NGOs. The reasons being cited are many. Some consider it wrong and even harmful to rely on NGOs for the implementation of projects. The approach towards depending on NGOs is considered by some as manifestations of casual and careless attitude toward plans.\textsuperscript{181}

In the developed societies, the role of NGOs have been identified as problem solvers of marginalised groups while in developing societies, as argued by some social scientists, the NGOs by being under the government fold have very little to play in the ocean of development or they can play a marginal role. As Bhambri\textsuperscript{182} argues in the context of Indian NGOs that these organisations are a footnote in Indian development. He argues that the problems of development require more of state intervention than less of it. Jagannandan\textsuperscript{183}, a staunch believer of government monopoly argues that the growth of a welfare state has created doubts about future of the NGOs.

Adiseshaiah\textsuperscript{184} holds different opinion as saying that given the small area covered and a low level of financial resources, the NGOs can at best supplement government efforts but cannot supersede. They can not work in areas like research. He also holds the view that while NGOs are localised groups, the state is all encompassing. Given the small area covered and low levels of financial resources, the NGOs can at best be supplement state efforts but cannot supersede is the trust of his arguments.

\begin{thebibliography}{9}
\bibitem{176} Bharat, dogra, "hopes may remain just hopes", \textit{Yojana}, 28 (20 - 21), 1984, p. 35 - 36.
\bibitem{179} A. N. Seth, \textit{Role of Voluntary organisations in Construction works in rural areas}, \textit{Mainstream}, 6 (1), 1985 - 86, p. 34 - 38.
\bibitem{181} Mohit Sen, "No, no, nothing done with them", \textit{Yojana}, 28 (20 - 21), 1984, pp. 23 - 25.
\end{thebibliography}
One school of thoughts holds that NGOs have the capacity to displace government, which is not considered capable of social change or sufficiently committed to the eradication of poverty as the main vehicle for promoting grassroots development.\(^\text{185}^{186}\) The grassroots organisations formed by NGOs are all seen to have the potential for linking up socially backwards and ladies men and women into full fledged political movements articulating issues which directly concern the poor.\(^\text{187}\)

While taking a critical view on the proliferation of NGOs Sachidananda\(^\text{188}\) and Dogra\(^\text{189}\) consider growth of NGOs as a result of money available in the field, both from national and international sources. So for many launching a NGO is considered as business proposition. While Chandra\(^\text{190}\) argues that setting up of a NGO are in some cases found one-man show or family enterprises. For the sake of money, NGOs plunge into all possible fields of activities without realising their own strength and limitations. Many NGOs of late, have become as bureaucratic as any other public rector organisation.

NGOs have only two sources of funding: one-government departments, and the other, foreign donations. Karat\(^\text{191}\) and Patnaik\(^\text{192}\) argue about the serious consequences of foreign money flowing into the NGO sector, and either called for virtual ban on foreign contributions or stringent regulations to control the flow of money. They further argue that national security is the main reason given in support of such measures.

While some NGOs thrive on government funding some like to maintain independent stance. As Sheth\(^\text{193}\) and Sethi\(^\text{194}\) hold the view that curtailing the flow of foreign funds indiscriminately could be a step to regulate and discourage NGO action. However, some have advocated that the NGOs should neither depend upon foreign nor the government sources for

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\(^{189}\) Bharat Dogra, "Hopes may remain just hopes," *Yojana*, 28(21), 1984, pp. 35-36.

\(^{190}\) Suresh Chandra, "Limitations of Volunteerism," *Mainstream*, 23(38), 1985, pp. 11-12.


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funding with the argument that "parasitism in any form can not be conducive for building a genuine people movement."

In the last decades NGOs have come out very successfully in involving people into development activities. While many public sector programmes have encouraged dependency and made little lasting impact after government support is withdrawn the NGOs by and large proved more successful than government agencies in utilising participatory methods and have made a significant impact, albeit largely on a local scale.

Some say that NGOs have moved into "niches" which reflect their methodology, which, according to development lexicon is "bottom-up" approach in contrast to the dominant government "top-down" approach. The top-down approach as against the "bottom-up approach has been proved flawed by NGOs for its inherent deficiencies and pro-rural elite biases. It is guided by a value system in which judgements about the needs of the rural poor are made without consultation.

NGOs have challenged this model with a "target group" approach, which again came under sharp criticism of development practitioners. The reasons being cited that it is a model not without its problems since the notion of "target" amongst the poor all too easily becomes an imposed model in which the rights of poor rural people in determining the "development process", though rhetorically acknowledged, are given insufficient emphasis.

NGOs have asserted themselves as a third party in the traditional relationship between the state and civilian society, where political parties represent the latter. The growing recognition of the effectiveness of NGOs at micro-level development has enabled them, over the years, to advocate an alternative development strategy.

The success of NGOs in various countries has depended on the existence of what Rumansara calls the political space, i.e., the social space in which people are given more

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198 Banuri and Holmberg, op. cit.

opportunity to take part in the decision making process, and are no longer dominated by bureaucrats, the state or the ruling regime. In countries where such possibilities exist, NGOs can acquire the ability to influence policy formulation and reforms.

Keeping in mind the financial situation being faced by many southern countries Banuri and Holmberg\textsuperscript{200} suggest that NGOs can provide an important supplement to the public sector at low cost. They maintain that without a strong movement towards political and economic decentralisation, including a consistent policy of strengthening institutions for collective decision making, the objectives of sustainable development will remain largely unfulfilled.

The Agenda 21\textsuperscript{201} calls on governments to draw on the “expertise and views of NGOs’ for sustainable development. NGO expertise and views encompass many practical functions which \textit{inter-alia} include poverty alleviation, mobilising public or certain groups, environmental promotion, delivery of services, awareness raising and communication, advocacy and challenging the status quo, promoting alternatives, training in, and use of, participatory approaches and soon. These functions are often complementary to government and the private sector, and can be exercised by individual NGOs or by partnerships and networks.

NGO coalitions can complement and buttress weak governments. This is common, for example, in the case of welfare and in engagement with local communities, where institutional constraints mean that government is limited in their capacity to use participatory methods. On the other hand, NGO coalitions can act as a check and critic where governments and the private sector are too strong to appropriating natural resources and causing adverse social and environmental impacts.

The failure in governance in third world countries is another reason which encourage NGOs to fill in the vacuum. In Kenya and Tanzania, for example, NGOs operate major portion in the health system. In Northern Pakistan the Agha Khan Rural Support Programme(AKRSP) is the leading actor in rural development support.

With respect to sustainable development NGOs cover a range of approaches\textsuperscript{202}

\begin{itemize}
\item Banuri and Holmberg, op. cit.
\item UNCED, \textit{Agenda 21 : Programme of Action for Sustainable Development}, UN Department of Public Information, United Nations, New York, 1992.
\item Jeremy, Carew - Ried et al., \textit{Strategies for National Sustainable Development : A Handbook for}
\end{itemize}
• Interest’ based NGOs (e.g. professional association)
• ‘Concern’ based NGOs (e.g. environmental welfare campaigning advocacy group)
• ‘Solution’ based NGOs (e.g. education and rural development groups)

Many NGOs, particularly the solution-based groups, are comfortable with ideas of participation and consensus and actively promote them. Others, who work through lobbying and advocacy, need to see their role as one of ‘disagreeing’, and prefer not to seek compromise. A few of the NGOs opts for taking approaches incompatible with sustainable development.

The OECD\textsuperscript{203} has pointed out that international NGOs, in their own right, make a significant contribution to funding for development assistance. It has noted a number of positive features about international NGO assistance that are pertinent to their participation in national strategies:-

• much of their help is there through, or in Cupertino with, local community groups;
• they tends to concentrate their activities in the least developed countries;
• they tend to direct their assistance towards the poor and other disadvantageous groups;
• they often provide a presence in rural areas or in neglected parts of urban and emphasise self-help approach;
• they use experts who tend to be committed to community based works, and who often cost less because of a willingness to live closer to local people.

Donors need to give much greater emphasis to supporting the role of international NGOs in national strategies. When compared with international companies, NGOs often bring a longer-term commitment to the countries they are serving. UN agencies and the World Bank need to form partnerships with international NGOs which can work on a scale, and with a form of intimate involvement, that brings the best results when technical support is requested by national strategy teams. The use by these big donors of large expatriate missions, involving ad-hoc

consultants can be especially counterproductive and can drain local capacities when more sensitive inputs would better encourage local initiative and action.

The OECD\textsuperscript{204} also observes that international NGOs can also help donors to identify and remove international barriers to the implementation of national strategies. Such barriers include externally determined development aid, unfavourable trade conditionalities, debt, and structural adjustment policies that do not support the national strategy.

Many a time, the NGOs consider the government-sponsored strategies are highly bureaucratic hardly people oriented. Involvement of people in programme formulation and decision systems is considered important to make implementation process effective. Given the philosophy, a large number of NGOs have developed and tested alternative strategies for service delivery, with an emphasis on cost reduction, quality of services, and also at times resource generation at local levels. These organisations have successfully demonstrated that there are alternative service delivery strategies, which helped question, the wisdom behind the existing system, to challenge the current practices, and to expose the shortcomings of the development undertakings by the government. Many of these organisations in Bangladesh like the Grameen Bank and BRAC run parallel to the government systems, making the contrast between government sponsored development programmes and the NGO programmes more visible.

Some of the studies on NGO operations in the South Asia are elucidated here in order to understand the success of NGOs in attaining sustainable development that have profound impacts on the rural society. Reza and Rahman\textsuperscript{205} in a study on the Bhuapur Development Project (BDP) run by the Bangladesh branch of Service Civil International (SCI), a foreign NGO, have found that how a locally developed Treadle pump left a tremendous amount of impact on the transformation of the life of the rural poor in char land which ensured sustainable livelihood to the people of the Tangail-Bhuapur belt of Bangladesh.

A classic case of restoring ecological balance in Alwar district under Rajasthan in India by Tarun Bharat Sangh (TBS), local NGO, was cited by Prema Gera.\textsuperscript{206} The TBS sought to revive

\textsuperscript{204}ibid.  
the traditional water harvesting systems in about 200 villages involving rehabilitation of about 10,000 hectares where the villagers were facing low agricultural production due to water scarcity and land degradation, low productivity of livestock due to scarcity of fodder and water, shortage of fuelwood due to accelerated rate of deforestation coupled with cowdung use, scarcity of drinking water. The NGO while identifying that the reviving of Johads (earthen dams) with the involvement of local community for storing rainwater run-off could be a trigger in ensuring sustainable development. Once the johads were constructed with the involvement of local community it arrested and stored rainwater run-off, improved water infiltration in the fields, recharged ground water and prevented the traditional wells from getting dried up. To ensure the optimum utilisation of the johads with participation of beneficiaries including the women, ‘Gram Sabha’ were formed at the village level with equal representatives from each household. While the per bigha yield of maize was 280-300 kgs before the johads the yield increased to 400 kgs/bigha. The productivity of livestock increased manifold. The aspects of human resources development like literacy and education, health care, vocational training and empowerment were also took into consideration while socio-economic development of the villagers was aimed at.

Cyrial Gamage\textsuperscript{207} cites an example of revitalisation of dry zone by Marga Institute, a NGO, in Srilanka. The area according to him was never benefited by major development initiatives of the government of Srilanka for revitalising and settlements. The dry zone was transformed into a productive area includes strengthening of traditional water harvesting technologies through revitalisation of village ponds and digging of deep wells for drinking and irrigation water. This has been possible because the NGO designed the technology package for rural resource development, amidst intensive interaction with the beneficiary population to ensure environmental sustainability. Local knowledge and experience were extensively used in conjunction with modern farming technology to derive an appropriate technological package for the perennial-cropping programme.

Grewal et.al.,\textsuperscript{208} cites the Sukhomajri experience of water harvesting by a local NGO, the Hill resources Management Society (HRMS) in promoting sustainable rural development in

\begin{itemize}
\item 207 Cyril, Gamage, \textit{Building Operational Strategies for People’s Initiatives: Sri lankan country Paper}, Asia Pacific Development Centre, Kuala Lumpur, 43 pp., Mimeo, 1993
\end{itemize}
North-Western India. He says prior to restoration work, the inhabitants of Sukhomajri experienced frequent crop failures due to erratic rainfall and soil erosion, inducing the farmers to shift to animal husbandry with emphasis on goat and sheep. Increased fodder demands led to further degradation of the forests already depleted by fuelwood extraction. The NGO identified water as a limiting factor and ensured people’s involvement in construction of earthen dams for water preservation.

The Sukhomajri model had the salient features as: (i) excess monsoon rainwater was harvested through earthen dams; (ii) this water was distributed through underground pipelines and gravity flows to farmlands; (iii) appropriate soil and water conservation measures such as planting of trees and grass were applied to the watershed; (iv) agriculture and animal husbandry were improved through the development of off-farm forestry, horticulture and reservoir fisheries; and (v) local support was ensured by the local participation of local people in organised societies geared to equitable distribution of water and restoration of watershed.

The model was replicated with a view to restoring degraded ecosystem in many villages in the region but the success was mixed. One of the oft-repeated criticisms is that while technology was replicated, the social dimensions like the aspects of rural power structure and dominant cast system were not taken into account during implementation.

Some of the NGOs in Bangladesh actively involved in rural development have their direct bearings on sustainable development. Gono Unnayan Prachesta (GUP) promotes agricultural development with equal importance to the protection and promotion of ecological balance in the rural agro-ecosystem. Proshika Manabik Unnayan kendro has been promoting environment friendly agriculture among its group members in some parts of Bangladesh though the success rate was found mixed.

The Rangpur-Dinajpur Rural Service (RDRS), a leading and old NGO in Bangladesh, has successfully introduced a low-cost irrigation technologies like hand pump and treadle pump which is widely used by the marginal farmers and landless farmers groups in the Northern part of the country and some other parts where the ground water aquifer is close by the surface. In addition to this the RDRS according to a study has successfully planted and protected nearly a million roadside trees and thereby generated employment opportunities for the poor and ladles under the RDRS programme.  

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Some location specific sustainable development efforts undertaken by NGOs in Bangladesh can be cited here for a better understanding of the success of NGOs where government could not do any headway. The Proshika MUK has been protecting a few remnants of Sal forests on Forest Department’s reserves with the involvement of ladles groups in Kaliakoir and Mirjapur under the Tangail district. Forty-four ladles groups, each group comprised of 12 men or women, have been protecting 400 acres of forest reserves in Kaliakoir while 19 groups have been protecting 350 acres in Mirjapur. In return the landless groups met their fuelwood from the left over branches from annual pruning of the forest trees. It may be mentioned that timber merchants in collusion illegally cut most of the forests in the Maduphur region with local politicians and forest department. The Proshika with the assistance of the Ford Foundation now plans to regenerate totally degraded forest lands with agro-forestry activities with the involvement of landless groups.

A study by CMES\textsuperscript{210} says Prothikrit and Polli Unnayan Sangstha (POUSH) -two local NGOs in Chittagong, mobilise support among surrounding villages to protect the remaining natural forest ecosystems. In order to stop dependence on the natural forests the two NGOs have expanded economic opportunities for the landless poor and women. They have successfully organised the poor and landless groups, those dependent on forest resources to undertake reforestation.

The Proshika started a programme called ‘socialisation of minor irrigation’ in 1980, subsequently adopted by most of the NGOs including the Grameen Bank and BRAC, with the objectives of managing ground waters by the landless poor groups by providing them with mechanical irrigation equipment, such as STWs, DTWs and LLBs. It was hoped that landless labourers and land-poor peasants would be able to establish irrigation services for land-owning farmers, rich and poor, and thus in the process the landless poor gets economically and socially empowered. Palmer-Jones\textsuperscript{211} in a study on the impact of Proshika’s minor irrigation programme with landless group with privately managed irrigation programme found that water distribution on small farmers plots in landless schemes appeared more efficient than distribution in the private schemes. The study also found that group member’s social status improved as they were able to


own and manage efficiently a productive asset. Notwithstanding, the marginal success in accruing benefits out of ownership of mechanised irrigation equipment by the landless groups the innovations of treadle pumps by RDRS, an NGO, for ground water irrigation came with the potentials of enormous amount of economic progress for rural poor in the Bangladesh society. The treadle pump is now being widely used by the landless poor groups and small farmers in the northern part of the country because of its affordability and efficacy for winter irrigation of crops.

Most of the studies so far made on the Grameen Bank and the BRAC are from socio-economic perspectives. Some studies on the impact of the GB on the lives of its loanees and on the wider context of the rural economy made by Ghai, Hossain and Rahman. The studies, though are old ones, show the most direct effect is accumulation of capital by the poor. An in-depth study of households in five Grameen villages and two control villages found that members had an income about 43 per cent higher than the target group in the control villages and about 28 per cent higher than the non-members in Grameen villages. Another study by Rahman on the social impact of the GB showed the higher level of consciousness among the Grameen members in terms of contraceptive use, use of hygienic latrine and higher participation in the grassroots elections.

So is the case with the BRAC. Whatever studies so far made all dealt with the socio-economic impact. But no study has so far been made from sustainable development viewpoint on the impact of the GB and BRAC in ecologically degraded areas of Bangladesh. In that sense the present study is the maiden one. So, both the NGOs have been purposively chosen for the present study so as to see their actual impact in respect of social and environmental sustainability in two sets of ecological conditions.

The NGOs under study, the Grameen Bank and BRAC with its vast network in the country also pursuing rural development programmes which has already left significant mark in some core areas in transforming the Bangladesh rural society where the incidence of poverty and

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social deprivation is bound to get reduced in the foreseeable future. Given their opt-cited success in poverty alleviation and related programmes for income generations the present study seeks for a comparative analysis of the impact of the two NGOs in two distinct ecological conditions of Bangladesh where the degradation of environment has reached a severe dimension. The purpose of the study is to see whether the Grameen Bank and the BRAC have been able to ensure domestic energy needs of the poor rural household, has they been able to reduce pressure of the landless poor on the Common Property Resources (CPR) upon which they depend for their livelihood security in terms of their daily requirements and for their livestock. Has they been able to reasonably motivate the poor to use cowdung and other organic fertiliser instead of chemical fertiliser for cultivation of their scanty land for food grain production. Has they been able to promote biological resources, here we referred in ecological resources, which is crucial for rural ecosystem. These are the few questions one may reasonably ask because without giving emphasis on these aspects the livelihood security of the rural poor can not be ensured in real sense for promotion of sustainable rural development.

1.4 Objectives of Study

The basic objectives of the study are as follows:-

1. Whether the Grameen Bank and BRAC have been able to effectively reduce incidence of poverty and slowed down population growth in the rural areas.

2. Whether the poverty alleviation programmes being pursued by the Grameen Bank and BRAC are associated with strengthening ecological foundation in the rural society.

3. To see whether the Grameen Bank and the BRAC have been really leaving a mark on rural resources generation while implementing poverty alleviation interventions in the ecologically fragile areas.

4. Whether the Grameen Bank and BRAC are playing a role in capacity building of the poor to generate biomass for household’s energy needs.

5. Whether they have been able to reduce pressure on the exploitation of natural resources by poor to the detriment of environment.

6. Whether they are helping the rural poor to cope up and adopt strategies to overcome the wrath of the fragile ecosystem.

7. Whether they mobilise and involve rural women and poor in homestead plantations and other afforestation programmes.
8. Whether they are really making tangible dents towards development of biological resources and capacity building at grassroots level in ecologically fragile areas.

9. To see whether the Grameen Bank and the BRAC have an edge in augmenting and stop shrinking of biological resources in the run-down rural ecosystem.

10. Have the Grameen Bank and the BRAC been able to stop the poor in using 'scrap biomass' for cooking and have they been able to involve the women and poor in planting tree for energy needs.

1.5 Hypotheses

1. Poverty alleviation programmes for villages under ecologically fragile areas if not integrated with local environmental concerns sustainable development cannot be achieved.

2. Without real empowerment of the poor and women in particular sustainable development cannot be achieved.

3. Without developing biological resources the livelihood security of the poor and landless cannot be ensured for promoting sustainable rural development.

4. Rural energy needs if not adequately taken care of environmentally sustainable rural Development cannot be achieved.

5. If strong community participation in the planning and management of ecological resources are not ensured sustainable development can not be achieved.

1.6 Areas of Study

The study broadly attempts to examine the role of two NGOs in sustainable rural development in two sets of ecological conditions, one is in flood plain zone and other one is in saline ecological zone of Bangladesh. The two areas chosen for the present study falls under the Mohanpur Thana and Dehata Thana respectively. The Mohanpur Thana falls under the flood plain ecological zone in Rajshahi District while the Dehata Thana falls under the saline ecological zone under the Satkhira District.

The landscape of the villages under the Dehata Thana has been altered by massive and extensive shrimp culture at an alarming rate. Some of the areas turned into a desert toll surrounded by saline water, with its rich natural and agricultural bounty lost forever. The
intrusion of salt water from the shrimp field gradually affecting the homestead plants, trees and other vegetation cover. The massive shrimp culture has had replaced the traditional agricultural activities in the region. With more and more land brought under the shrimp cultivation the availability of grazing land has been greatly reduced to the detriment of livestock and poultry population which have already been drastically reduced.

The socio-economic effects on marginal farmers, landless groups, share croppers, farm workers and women has been found manifold since shrimp culture increases salinity of soil and reduces available land for cattle grazing. Rearing poultry and livestock in the backyard of poor people is a major source of income and supporting livelihood for a large number of marginal and small farmers, which is again badly affected due to shrimp culture. There has been a decline in the livestock population causing manifold problems for agriculture. Moreover, the intrusion of salinity has been threatening kitchen gardens and vegetable patches around homesteads. Given the situation the vulnerable sections of the people particularly poor, marginal and small farmers are being gradually pauperised because of shrinking natural resource base and threatened life support system in the area.

In the flood plain areas of Mohanpur Thana located within the ambit of the river Padma and its tributaries the livelihood security of the poor remain in dire situation because of the frequent flash floods and the presence of water regime for most of the year excepting for a brief period in the short winter season. The people along this Gangetic flood plain particularly the poor are the worst victim of the vagaries of the nature. For most part of the year, particularly for a period of about eight months, the poor people have nothing to do except fighting the poverty, hunger and malnutrition. Whatever they form assets in the good season all are washed away with the perennial flash floods forcing them to live on the mercy of the nature. As a matter of fact over the years these areas have turned into perennial pockets of economically depressed areas with silent famine like situation prevails for at least two months during the two crucial Bengali months: Ashwin and Katrik.

The area chosen under the present study has been a constant victim of the flash flood in the rainy season and drought in the dry period. It does not have any patches of natural forests and hardly one can find a few traces of sparse vegetation in the households. The people, particularly the landless and marginal farmers, suffer greatly due to the natural vagaries. They have no other choice but to depend on the natural resources for their survival.
With the rise of poverty and population growth more and more people of this area rely on the natural resources, particularly the haors and beels, for their livelihoods. The haors and the baors, meaning the depressed water bodies of the area are no more looked as a rich depository of rich biodiversity because big and rich farmers draw water for boro cultivation during the winter period and harvest all the fishes when the water recede. Despite the active presence of NGOs in this area poverty continues to remain and a vast majority of the poor people inspite of by being in the NGO domain could not come out from the vicious circle of poverty. The all-pervasive poverty has ushered in a new situation where the poor people have no options but to remain on the mercy of the nature. The situation calls for a new strategy for the poor people to live with the flood and natural vagaries where the vegetation pattern, agro-ecosystem and other essential life support systems need to be evolved within the existing realities.

In the two scenarios as stated above, despite the piecemeal efforts by government agencies and NGOs the poor people continue to remain in perpetual poverty trap. The fall out of which already been manifested in the form of dwindling natural and man made ecological resources in the villages under study. The failures on the part of these agencies can be attributed to giving less priority to development of natural resource base and neglect to the repairment of degraded ecosystem in the rural areas.

In view of the above, the present study will critically analyse the role of two major NGO, the Grameen Bank and the BRAC, in promoting sustainable rural development given the worsening situation prevailing in the two sets of distinct ecological conditions. The present study will critically review the programme activities of these two NGOs and assess the role being played by them in promoting sustainable rural development in these areas.

For the purpose of present study five villages from saline affected areas under Dehata Thana of Satkhira district and five villages from flood plain Mohanpur Thana of Rahshahi district have been selected. Both the Grameen Bank and the BRAC have their programme activities in these two Thanas. Of the five villages chosen from each Thana one village will be treated as control, which is not included by the NGOs in their operations, so as to compare the effectiveness of NGO programmes with the Control village.
Of all the NGOs the Grameen Bank and BRAC has been chosen for the present study, as both the NGOs are very active in these two ecologically degraded areas to combat poverty situation. As a matter of fact no other NGOs prominently figure in these regions because of their geographical location and physiographic features which many of the NGOs may not find cosy to undertake poverty alleviation programmes. The other consideration is to see how effective they are given their massive access to the rural areas with the kind of manpower and logistic supports they have, in handling the promotion of sustainable rural development in Bangladesh. Another NGO, which is worth mentioning, is Proshika. Initially it was also considered for inclusion in the present study but due to time constraint it was finally dropped. In the same vein the desert prone areas of the country were also considered for the present study but later on it was abandoned for the same reason as stated above.

1.7 Database and Methodology

The present study has been based on two types of data: primary and secondary data. The primary data was collected through field study, personal interview and questionnaire schedule. A preliminary reconnaissance survey was made to select households in the targeted villages in two socio-ecological conditions. The major focus of the study is landless men and women who are actively involved in the NGO programmes.

Four sets of questionnaires were prepared to obtain information on the impact of both the Grameen Bank and BRAC. The title of the questionnaires are: different programmes being pursued by the NGOs under study on the (i) slowing down of population growth (ii) poverty alleviation through generation of employment opportunities based on natural resources development (iii) Human Resources Development (iv) Biological Resource Development and (v) Rural energy development. The questionnaires were subjected to reliability and validity tests on 20 subjects. Upon validity test among the subjects it was found that there was no significant discrepancy among the subjects while replying to the same questions in the second phase meaning the final phase of interview. To gather information on the socio-economic conditions of the households a separate household survey sheet was prepared and information gathered in this regard through visits of the households. The information on the agro-ecological conditions of the saline affected areas and flood plain areas under the study were obtained through Rapid Rural
Appraisal (RRA) methods adopted and followed by the Centre for Integrated Rural Development in Asia and Pacific (CIRDAP) in one of its recent study. 218

A one-shot survey was made to obtain the information on socio-economic background of the loanee households, credit history, their income expenditure pattern, length of membership with the Grameen Bank and the BRAC.

The information provided by loanees were again subjected to recheck in a random manner after a gap of two weeks in order to see if the respondents gave their information in a proper way or not. However, there was built-in checking mechanism within the questionnaires and whenever a discrepancy was noticed, the respondent concerned was consulted again.

The detailed impact evaluations were carried out with formal questionnaire surveys on the households. The women loanees were separately asked questions to evaluate impact study. The measurement of NGO impacts was made largely by the control area approach. This involved comparisons of observations in the impacted villages of the NGOs with those from the control village, which has similar agro-ecological condition vis-à-vis the NGO villages before the NGO intervention took place. In principle, the control village would be subject to any general trends in operation since NGO intervention thereby making any differences between NGO villages and control villages attributable to the net impact of the NGO. In order to achieve such comparability, the control village is selected with great care with emphasis on similarity of the NGO villages in terms of pre-NGO intervention.

For evaluation a control village is selected so as to capture all possible changes due to NGO interventions. This village is selected in such a way that it is adjacent to the NGO villages, but is not affected in any way either by the Grameen Bank and BRAC intervention or any other NGOs.

The secondary data relating to the Grameen Bank and the BRAC are obtained from the field offices and the headquarters. Some data of secondary nature are obtained from the documents of Bangladesh government and UN agencies based in Dhaka.

218 CIRDAP, Environment and Ecological Aspects of Poverty and Implications for Sustainable Development, MAP Focus Study Series No. 3, December 1994.
Data collection for this study involved a combination of methods. Major part of data was collected through questionnaire-based survey among the households under the Grameen Bank and the BRAC. Specifically designed questionnaires were administered for collection of information from women and male members. Actual sample size was determined on the basis of initial field visits to the areas under study to collect more accurate and complete picture on relevant parameters. Direct questions were also asked about the impact of the two NGOs under study on the promotion of man-made natural resources like biomass, different types of animal and plant husbandry and so on. Information on the households was obtained by interviewing the head of the household.

Selection of villages for the study

In the village level survey two villages each under the Grameen Bank and BRAC in flood plain and saline ecological zone respectively were randomly chosen keeping in view the similar physiographic feature. And one village from each of the ecological regions outside the domain of NGO operations was chosen as control village for the convenience of comparison of the impact of the NGOs in the study areas. While selecting the control village it was made sure that the village is not adjacent to the ones under the NGO domain because at the end of the day it may not give a real picture if in case the households are influenced by NGO programmes for their proximity to a village which is included by either of the NGOs under study.

2.7.2 Selection of households

For conducting household level surveys a total of 300 households altogether were selected randomly, 150 from five villages under Mohanpur Thana of the Rajshahi District and similar numbers from the Debhata Thana of the Satkhira District. The break-up of the village wise households is given as under:
<table>
<thead>
<tr>
<th>Name of the Thana</th>
<th>Name of the NGO</th>
<th>Name of the village</th>
<th>No. of households surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mohanpur</td>
<td>Grameen Bank</td>
<td>Baksail</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gopail</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>BRAC</td>
<td>Bishuhara</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Saipara</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Saympur</td>
<td>30</td>
</tr>
<tr>
<td>Debhata</td>
<td>Grameen Bank</td>
<td>Ragunathpur</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kulia</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>BRAC</td>
<td>Tiket</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subornabad</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Ramnagar</td>
<td>30</td>
</tr>
</tbody>
</table>

The household survey of the villages in two ecological zones under two Thanas is conducted in two phases, one during the period from November to February in 1997 and the other one during January to March 1998. Keeping in view the background of the subjects the Bengali version of the questionnaires were distributed among them in pre-arranged group meetings of the members of the Grameen Bank and the BRAC on various occasions during the study period. In case the subjects were not available in the group meetings personal approach was made to get the questionnaire filled-in on the stipulated time. While the data collection was made adequate precautions were taken so that subjects do not repeat or mistake of the questions asked for. After obtaining the filled-in questionnaires the data were analysed on the basis of descriptive statistics such as percentage, histogram, bars, pie chart and graphs.