

**Background Document for the Poverty Mainstreaming Review
Workshop
Paro, Bhutan
10th of March 2010 - 12th of March 2010.**

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1. Introduction and Summary

Bhutan has been fortunate enough to adopt a unique development philosophy in GNH, which seeks to provide a more meaningful purpose for development than just the mere fulfillment of material satisfaction. In line with the vision of GNH all development plans focus on achieving broad based sustainable growth, improving the quality of life, ensuring the conservation of the natural environment.

While Bhutan has been has received recognitions and commendations world over for its development philosophy and sustained efforts towards the conservation of the environment, meeting future development needs without compromising on the environment will impose greater challenges at all levels. Article 5 of the Constitution mandates the country shall remain under a minimum of 60 percent forest cover at any point of time. This implies that the development needs should, if required, not compromise on more than 40 percent of our forest cover.

At the outset, it may seem our commitment to conserving the environment may make it difficult to achieve our other development objectives particularly socio-economic development and poverty reduction. But when one considers, that the socio economic growth of Bhutan is driven by sectors (such as hydropower, renewable natural resources) which are dependent on the environment, and that more than 70 percent of the population depend on natural resource based occupations for their livelihoods, and more than 98 percent of the poor are rural based and dependent on natural resources for their livelihoods, it becomes apparent that the conservation of the environment actually contributes toward the realization of our other development objectives. The challenge would be to consider the linkages between these mutually reinforcing objectives, and integrate them in our plans, policies, and programs at all levels.

The following sections will briefly dwell on defining poverty environment mainstreaming, the reasons behind the need to mainstream, its relevance to Bhutan, and the current practices / initiatives in Bhutan which may be considered to be poverty mainstreaming.

2. What is Poverty Environment Mainstreaming?

The UNEP hand-book on mainstreaming poverty-environment linkages into development planning defines poverty environment mainstreaming as *'as an iterative process of integrating poverty-environment linkages into policymaking, budgeting and implementation processes at the national, sector and sub-national levels'*. The process involves acknowledging and establishing the linkage between poverty and environment and addressing the two in an integrated manner in policies, plans and budgets. In other words, it is about viewing the environment as a productive resource for all aspects of development and using it sustainably.

The difference between environment mainstreaming and poverty environment mainstreaming is a grey area. One may draw parallels, between poverty environment mainstreaming and environment mainstreaming and infer the two processes are similar. This observation may hold true in some cases, but there are subtle differences between the two. Environment mainstreaming would in the strictest sense focus only on integrating environmental concerns into policies, plans, or programs, there would be no focus on the poverty aspects per se. This may give rise to outcomes similar to those derived from poverty-environment mainstreaming, only if the policies, plans, programs are formulated to address poverty. In most developing countries this would be the case if the environmental concerns are integrated into their poverty reduction strategy papers, or development plans and programs with poverty reduction objectives.

3. Why mainstream poverty-environment concerns? What are the linkages between poverty and environment?

While it can be argued that all mankind depends on the eco-system goods and service for their livelihood and well being, it is the poor who rely more heavily and directly on the environment as a source of their livelihood. Consequently the poor are more vulnerable and suffer the most from any destruction to the environment. The health of the poor is also dependent on the health of the environment, and the health of the poor has bearings on whether they remain or move out of poverty . On a broader scale the natural resources contribute significantly to the national income and wealth of the less developed countries.

The linkage between poverty and environment can be conceptualized in terms of their relationship to livelihoods, resilience to environmental risks, health and economic development.¹

- **Livelihoods:** The environment provides a range of ecosystem goods and services on which the livelihoods of the poor depend. The condition of environmental resources and access to use and own these resources have significant bearings on the ability to sustainably improve their livelihoods and well being.

In Bhutan poverty is a rural phenomenon. It is estimated 23.2 percent (146,100 people) of the population live under the poverty line (Nu.1096.14 per person/month), and 6 percent of the population (37,200 persons) live under the food poverty line (Nu.688.96 per person/month). Of the total population under poverty 98.1 percent were rural based and 1.9 percent residing in urban areas. It was estimated that 30.9 percent of the people living in rural areas fell under the poverty line.² The rural people depend on subsistence agriculture, natural resources and ecosystem services for their livelihood.

¹ 'Mainstreaming Poverty Environment Linkages into Development Planning, A Handbook for Practitioners' 2009, UNDP-UNEP

² PAR 2007

Approximately 70% of the Bhutanese population depends on crop agriculture, livestock rearing, and renewable natural resources for the livelihoods, the dependence is more pronounced in rural areas.

- **Resilience to Environmental Risks:** Given their heavy dependence on the environment as a source of livelihood or well being , the poor are more vulnerable to natural disasters, such as floods, droughts, climate change and other environmental threats that effect their livelihoods and sources of income and food.

Bhutan's heavy dependence on the hydropower and agriculture makes it vulnerable to changes in the environment brought about by events related to development and climate change. This makes the rural poor who depend directly on crops and livestock most vulnerable section of the population.

- **Health:** Poor health contributes to poverty and poverty perpetuates poor health. Improving the health of the poor enables them to move out of poverty. The poor health of individuals (particularly bread-earners) and households affects their welfare and even leads to their breakdown as economic units. The health of the environment accounts for a significant portion of health risks to the poor people.

There is no data on the linkage between environment and health in Bhutan, however, cross country studies such as those conducted by Prüss-Üstün and Corvalán (2006)³ observed that environmental factors play a role in more than 80 of the major diseases and injuries world wide. They estimate that 24 percent of the global disease burden and 23 percent of all deaths can be prevented through environmental interventions. The poor on bhutan

- **Economic Development:** The socio-economic development of a country depends directly or indirectly on the health of the environment asset base. The asset base consists of productive natural eco-systems and resources which generate important goods. The contribution of the environment to socio-economic growth is particularly dominant in less developed countries where sectors such as agriculture, energy, and tourism play a dominant role and are dependent on the environment.
- More than half of the contribution to Bhutan's GDP can directly attributed to sectors dependent on natural resources. Below is list of sectors and their contribution to the GDP.

³ Prüss-Üstün, A., and C. Corvalán. 2006. *Preventing disease through healthy environments: Towards an estimate of the environmental burden of disease*. Geneva: World Health Organization.

- Agriculture, livestock, forestry (RNR Sector) accounted for 18.9 percent⁴ (Nu.10.25 billion) of the GDP in 2008;
- Livestock contributed 5.5 percent⁵ (Nu. 2.9 billion)of the GDP in 2008
- Forestry and Logging contributed 4.4 percent⁶ (Nu.2.3) of the GDP in 2008
- Hydropower contributed 20 percent⁷ (Nu. 12 billion) of the GDP in 2008;
- Tourism, contributed 2 percent⁸ (Nu. 1 billion) of the GDP in 2008
- Mining and Quarrying contributed 2.3 percent⁹(1.2 billion) of the GDP in 2008;
- All together, the above sectors represented nearly 53% percent¹⁰ (Nu. 29.65 billion) of the GDP in 2008;

Hydropower and the renewable natural resources sectors have been the primary driving force for economic development of Bhutan. These sectors will still play a vital role in the future growth of the country, therefore it critical to ensure their contributions can be sustained.

The contribution of tourism is also significant. It not only contributes significantly to the economic growth and the balance of payment position. There are initiatives undertaken to ensure that tourism will support rural livelihoods.

Further, with RNR sector contributing to about 20 percent of the GDP, and providing livelihoods to more than 70 percent of the population, the role of the environment in poverty reduction cannot be undermined.

With more than 50 percent of the wealth of Bhutan coming from its natural capital, which is far above the share of the natural capital for any other group of countries. It is clear that the socio-economic growth of the country is contingent upon the capacity of its natural resources to meet it s growing needs, hence efforts would have to be made in sustainably using the natural resources.

4. Current Initiatives Related to Environment Mainstreaming in Bhutan.

Whilst the reduction of poverty and preservation of our environment has always featured as a primary objective of all development plans, they are seldom addressed in an integrated manner. In all the five year development plans poverty and environment are

⁴ Statistical Year Book of Bhutan 2009.

⁵ *Ibidem*

⁶ *Ibidem*

⁷ *Ibidem*

⁸ *Ibidem*

⁹ *Ibidem*

¹⁰ *Ibidem*

addressed separately, with separate policies, programs and budgets. Efforts related to the in most cases focus on safeguarding the environment.

Poverty reduction features distinctly as an objective in all sectoral plans at all levels, and in its multidimensional form is addressed by design in every sectoral plan, program or project. Whereas Environment conservation features as a separate chapter in the plan document, and find mentions in some of the plans and programs. Not all sectoral plans address or integrate environmental concerns.

It is evident that in Bhutan, environment is a sector which is to be safeguarded from the negative impacts brought about by pursuit of development. The environment is rarely seen as a productive resource. While efforts to safeguard the environment is necessary, our increasing development needs against the backdrop

4.1 Environmental Laws and Regulations

Bhutan has been fortunate to have the adequate and well defined legislation with regards to conservation of the environment. The laws and their associated legislations seem to fit well with development needs of the country, but their enforcement needs further strengthening.

Article 7 of the Environmental Assessment Act 2000 states:

The Royal Government shall ensure, environmental concerns are fully taken into account when formulating, renewing, modifying, and implementing any policy, plan, or programme, as per regulations that may be adopted according to Article 32.2.

The Regulation for the Environmental Clearance of Projects, 2001 adopted under the aforementioned acts states that the purpose of the regulation is:

- To provide meaningful opportunities for public review of potential environmental impacts of projects;
- To ensure that all projects are implemented in line with the sustainable development policy of the Royal Government;
- To ensure that all foreseeable impacts on the environment, including cumulative effects are fully considered prior to any irrevocable commitments of resources or funds;
- To ensure that all feasible alternatives are fully considered;
- To ensure that all feasible means to avoid or mitigate damage to the environment are implemented;
- To encourage the use of renewable resources, clean technologies and methods;

- To ensure that concerned people benefit from projects in terms of social facilities;
- To help strengthen local institutions in environmental decision making; and
- To help create a uniform, comprehensive data base on the environmental and cultural conditions and assets in Bhutan.

Though laws and regulations with respect to environmental conservation mandate the integration of environmental concerns in all policies plans and programs of the document, currently in most cases integration takes place only for physical development programs such as infrastructure projects. The integration takes place through environmental assessments, environmental impact assessments and adoption of mitigation measures at the time of the implementation of the project. The following table presents a list of the existing laws and regulations related to environmental conservation:

National Environment Protection Act 2007	Sectoral Environmental Assessment Guidelines: <ul style="list-style-type: none"> • Mine (Aug 2004) • Highways and Roads (Aug 2004) • Industrial project (Aug 2004) • Hydropower(Aug 2004) • Transmission and distribution lines (Aug 2004) • Forestry (Aug 2004) • Urban development (Aug 2004) • Tourism (Aug 2004)
Environmental Assessment Act 2000	
Regulation for the environmental clearance of projects & regulation on Strategic Environmental Assessment (2002)	
Waste prevention and management Act (2009)	Environmental Codes of Practices: <ul style="list-style-type: none"> • Storm water drainage systems (Aug 2004) • Tourism activities (Aug 2004) • Installation of underground and overhead utilities (Aug 2004)

4.2 Environmental Concerns in the Tenth Plan Document and Planning Guidelines

The Environment Section in Volume One of the Tenth Five Year Plan states:

'the environment sector will require more attention than before in view of the accelerated pace of economic and development activities accompanied by increased expansion of infrastructure development, urbanization, industrialization and consumption patterns that are likely to put an even greater burden and stress on the natural environment.

Additionally, environmental conservation imperatives will be increasingly challenged by the need to balance it judiciously against the urgency of sustaining and improving rural livelihoods and ameliorating poverty. Close attention will be required to ensure that the costs of environmental conservation do not fall disproportionately on the poor through crop loss or limited access to forest resources or cultivable land.

The rich environment naturally confers significant opportunities and in Bhutan's context it is linked to the rich water resources available in the country. The vast hydro-power resources are Bhutan's natural comparative advantage, the sustainable exploitation of which depends on the health and quality of the country's watersheds. The management and protection of the critical watersheds thus provides not just an environmental benefit but immense economic rewards and hence is accorded a high development priority.

Correspondingly the planning guidelines state:

All plans shall be formulated to ultimately contribute towards strengthening the four pillars of GNH: i) promotion of equitable and sustainable socioeconomic development, ii) preservation and promotion of cultural values, iii) conservation of the natural environment, and iv) good governance.....

Environment is a cross-cutting issue that is intimately intertwined with poverty reduction. Therefore, all sectors, agencies, dzongkhags and gewogs should mainstream environmental issues in all their policies, plans, programmes and projects and build adequate mitigation measures to minimize any adverse impact on the environment.....

Sectors should ensure that their programmes, particularly infrastructure development programmes, do not have adverse effects on the environment.

The statements above acknowledge the role environment plays in the development of the country and reduction of poverty. They dwell on the need to safeguard our environment in the face of increasing development needs, the likely conflict between poverty

reduction and environmental conservation objectives, and also on the critical role of the environment in development as an essential factor of production.

As a whole the statements broadly reflect the linkage between poverty and environment and the need to address the two in an integrated manner. This acceptance has manifested itself in various forms within the planning guidelines, policies, plans, and programs. However, as elucidated in the following sections, most of the efforts are expressions of *'intent'* to preserve the environment at the policy or planning levels in terms of objectives and statements, and do not necessarily translate *'visibly'* into *'actions'* at program or project levels. It is also evident, almost all efforts go towards the mitigation of adverse impacts on the environment at the time of project implementation and rarely during the planning stages.

4.3 Environment Concerns in Plan Objectives and Targets

Within the planning guidelines only the Transport, Manufacturing and Industries, and the Environment Sectors have reflected environmental concerns in their objectives and targets. Within Volume two of the plan document, while all programs address poverty, the environmental concerns are visibly addressed only in the plan objectives or targets of the Ministry of Agriculture, Ministry of Economic Affairs and the National Environment Commission. However, it must also be noted that in some of the programs environmental concerns though not reflected in the program profiles, are addressed by way of environmental impact assessments, environmental friendly construction practices, and cost benefit analysis at the time of implementation.

4.4 Environment Concerns in the Tenth Plan Program Profiles

The following table presents a list of programs from the Tenth Plan Program Profiles which include projects or activities related environmental conservation¹¹:

	Program	Projects/Activities related to Environmental Conservation	Does it address PE Linkages	Responsible Agency or Unit
1	Irrigation and Water Management Program	Has activities related to Water Harvesting, and alternative methods of irrigation which are more efficient.	yes	
2	Horticulture and Crop Development	Has activities related to horticulture and crop development through increased productivity and better management.	yes	
3	Organic and Natural Farming	Includes developing organic farming policy, strategy and implementation plan.	yes	
4	National Medicinal and	Includes development of sustainable	yes	

¹¹ The programs were selected based on the details in the result based framework for the programme.

	Aromatic Plants Programme	collection and cultivation packages for priority species		
5	Integrated Soil Fertility and Sustainable Land Management Programme	Includes activities related to adoption of sustainable land management practices and capacity building.	yes	
6	Feed and Fodder Development Programme	Includes activities on rangeland management and development, and improved technologies to enhance feed and fodder development.	yes	
7	Targeted Highland Livelihood Support Programme	Includes activities on fodder improvement and promotion of alternative energy sources for domestic purposes.	yes	
8	Participatory Forestry Programme	Includes activities for sustainable management of forests by communities and private entities.	yes	
9	Non Wood Forestry Resource Development Programme	Includes activities for development of NWFP management strategy, resource assessment guidelines, and harvesting manuals.	yes	
10	Forest Resources Development Programme	Includes activities for sustainable management of FMU system, management of forests outside FMU systems, and National Forest Inventory.	yes	
11	Watershed Management and Plantation Programme	Includes activities related to management of watersheds	yes	
12	Forest Protection Programme	Includes activities related to protection of forests.	yes	
13	Nature Conservation Programme	Includes activities for management and conservation of protected areas, biological corridors, and management plans and integrated community development programs.	yes	
14	Sustainable Environment Management and Institutionalization of Cleaner Technology	Includes programmes to promote adoption of CTEM by industries and mines.	yes	
15	Rural Electrification Programme	Includes activities for rural electrification in a sustainable manner.	yes	
16	Development of Renewable Energy	Includes development of alternative sources of renewable energy.	yes	
17	Conservation of the Environment	Includes programs related to environmental mainstreaming, strengthening environmental management system, institutionalization of the EA process and drafting of environmental regulations.	yes	

In the entire volume two of the tenth five year plan there are more than 110 programs proposed by all sectors and autonomous agencies at the central level. While all programs contribute towards poverty reduction, the environment concerns are visibly addressed only in the above mentioned programs.

However, it must be noted that the EA Act 2000 requires all development policy, plan, or program. All development policies, plans, or programs require an environment clearance, which is granted or refused based on, amongst others an environmental assessment, or an environmental impact assessment. If we assume, that all development plans or programs obtain environmental clearances before implementation, then it would be safe to deduce that environmental impact mitigation measures have been adequately addressed in most programs.

5. Institutions

5.1 National Environment Commission (NEC)

The NEC is mandated to look after all issues related to the environment in Bhutan and ensuring sustainable development. It is responsible coordination of inter-sectoral programs, implementation of policies and legislations with regard to the environment. It also monitors the impact of development on the environment and aims to put in place the necessary controls, regulations and incentives to the private/public sectors to achieve sustainable development through the judicious use of natural resources. The NEC Secretariat plays a key role in promoting sound environmental policies and investments. This Secretariat is responsible for ensuring that Bhutan follows a sustainable development path and that all projects be it public or private, take into consideration environmental aspects.

5.2 Environmental Units (NEC)

As per the EA Act 2000 all agencies are required to establish environmental units for ensuring compliance with terms of environmental clearance and occupational health and safety requirements.

5.3 District Environmental Committees and District Environmental Officers (NEC)

The local governments also have district environmental committees supported by the district environmental officers.

The environmental clearance procedures have been decentralized, with authority for issuing clearance devolved to competent authorities within sectors and local governments for specific activities.

5.4 GNH Commission

The GNH Commission is responsible for the formulation of overall development strategies and coordination sectoral Five-Year Plans and programmes at the central as well as the local levels. The Commission is also responsible for aid management, co-ordinating inter-ministerial development programmes, and monitoring and evaluating programmes at the macro-level. As such the responsibility mainstreaming of cross-sectoral issues within plans and programs.

6. Conclusion

Bhutan is far ahead of most developing countries in terms of development plans and strategies and the processes adopted for their formulation. It is evident from above, some of the pre-conditions that may contribute towards the successful integration of poverty environment concerns in our policies, plans, and programs, already exist. We have the required laws and legislations, institutions. What may be required is an improvement of the planning process and the strengthening of institutional capacities so that cross-sectoral issues are integrated into our policies, plans, and programs.