**Regional workshop of Environmental Mainstreaming for a Green Economy**

***Some summary workshop notes:***

***based on presentations, plenary discussions and working group reports***

On 3-5 May 2012, the Nepal-based Asian Centre for Environment Management and Sustainable Development (AEMS) and IIED organised a regional workshop on environmental mainstreaming for a green economy. The workshop was held at the Club Himalaya hotel in Nagarkot, near Kathmandu. The 30 participants from Bangladesh, Bhutan, India and Nepal included senior government officials, environment and development experts and practitioners, private sector representatives, academics and NGOs (see Appendix 1 for list). They shared experience of environmental mainstreaming and discussed what the green economy concept means for their countries and how it can be taken forward.

The first half of the workshop involved a series of presentations and discussions on international and participant country experience of green economy and environmental mainstreaming. These were followed by working group discussions and plenary debates on what the green economy means to countries, and an assessment of the strengths, weaknesses, opportunities and threats of the green economy. The final plenary discussions addressed the value and potential of the green economy concept in the Himalayan region and identified some key green economy issues to be transmitted to participant country governments as they prepare for international discussions on this theme at the Rio+20 summit in June 2012 (see Appendix 2 for agenda).

1. **What does green economy mean for countries in the Himalayan region ?**

The green economy (GE) is a new concept that is only just beginning to emerge in the Himalayan region, although all countries have been pursuing initiatives to promote wise environmental management and sustainable development for several decades – to varying degrees of success. Participants recognised the value and potential of GE, interpreting it as leading to “increased human well being and social equity with reduced environmental risks and ecological degradation”. It was noted. They saw GE as a way to tackle hidden GDP losses and low carbon development including pro-poor and natural resource management, as well as to reduction poverty. Key ingredients to making progress towards GE will be a focus on environment mainstreaming and introducing systems of national green accounting and natural resources accounting at village levels (eg for Village Development Committees in Nepal).

Several underlying needs were identified: achieving sustainable development; reducing poverty; mitigating and adapting to climate change; managing disasters; and guaranteeing energy self-sufficiency in an ecofriendly manner.

To achieve a transition to GE will require:

* ensuring a resilient development path to reduce the impacts from disasters, climate change and environmental hazards;
* more in-depth analysis of what a GE means for each country and examining the opportunity costs;
* undertaking economic impact assessment – it must be seen to be viable and profitable;
* securing supportive technology, market and trade conditions and rule (at national and international levels);
* Conserving natural resources and biodiversity – through sound management and protection
* Raising awareness of the GE concept and empowering communities (farmers, marginalized, women) to play their critical roles – through participatory approaches;
* Tapping into indigenous knowledge and promoting appropriate technology;
* Strengthening institutions and building capacity (focusing particularly on the environment);
* Promoting sustainable consumption and production habits;
* Introducing incentives (financial) for eco-friendly production;
* Promoting organic/sustainable agriculture (eg joint forest management, community forestry)
* Promoting green buildings;
* Promoting eco-friendly renewable energy
* Converting waste to wealth (eg through power generation, manure production, recycling);
* Adopting decentralized, cooperative and community-based approaches;
* Promoting eco-friendly public transport and discouraging the purchase of private vehicles;
* Sustainable water management – promoting the optimal use of water in agriculture and industries;
* Appropriate land management;
* Appropriate pricing of water and power;
* Balanced regional development – reducing migration

Environmental mainstreaming is an important element of securing the transition to a GE, through:

* Strengthening and disseminating information and knowledge about environmental assets and how they underpin economic development and livelihoods;
* Strengthening environmental research;
* Monitoring and evaluating ecosystem services;
* Promoting the participation of policy-makers and all stakeholders in linking environment with development;
* Establishing effective monitoring;
* Incorporating ecofriendly best practices I n economic development.

Bangladesh

1. Environmental and climate change mainstreaming used to be seen in the context of development
 priorities and trade-offs between policies.
2. Commitments have been made in policies, plans and frameworks, and tools and guidelines have
 been developed, but not translated into action.
3.. ‘Policy readiness’ is low for green development, but could be sufficient to promote ‘resilient
 development’ which is now a mature concept - and this could be used to promote GE
4. There is institutional chaos in environment and climate change mainstreaming. More coordination
 in planning, finance and environmental ministries is key for success.
5. There is no clear entry point to mainstream environment (particularly regarding climate change)
 into private sector

Nepal

1. Nepal has yet to evaluate the benefits and threats of adapting to green economy
2. GE needs to be adapted to the existing economy by making it greener - emphasising development that is low carbon, resource resilient and socially inclusive

Bhutan

1. There has been a concerted effort to coordinate environmental mainstreaming.
2. It is very challenging for Bhutan to remain carbon neutral. But it presents an opportunity to pursue GE development. This is seen as the same as working towards environmental mainstreaming, focusing at policy and planning levels.
3. Key areas needing attention are capacity building in all the relevant sectors and engaging as many sectors as possible.
.

India

1. Capacity building for key stakeholders is vital.
2. Information Planning and monitoring – role of information
3. Participation approach

**2. Strengths, weaknesses, opportunities and threats of the green economy concept**

One group (Annapurna) analysed the strengths, weaknesses, opportunities and threats of the green economy concept in terms of three particular themes: energy efficiency, green building and payment for ecosystem services (see Table 1).

A second group (Everest) looked at low-carbon growth, resource efficiency and making GE socially inclusive (Table 2).

**Table 1: SWOT analysis of the green economy in the Himalayan region – Annapurna Group**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Strength** | **Weakness** | **Opportunity** | **Threat** |
| **Energy efficiency – reducing dependency on fossil fiels** | * promotes indigenous skills and technical know-how,
* Cost-effective,
* High demand.
 | * Inefficient/less efficient
* Limited scope in application
 | * Potential for employment opportunities
* Multiplier effect for the economy
 | * Change in peoples’ perception and lifestyle
 |
| **Green building –promoting innovative and efficient technologies and materials** | * Locally available materials and skills
* Increasing recognition
 | * Limited scope (only new building)
* Requires more space and costs
* Frequent maintenance
 | * Energy saving
* 3Rs (reduce, recycle and re-use)
* Increased employment
 | * Change in lifestyle
* Extension of technical know-how
 |
| **Introduce taxation and pricing for ecosystem services** | * Provides additional revenue
* Sustainable use of natural resources
* Reduction of waste
 | * Pricing of NR
* Lack of political will
 | * Optimal utilisation of NR
* Increased production
 | * Implementation
 |

**Table 2: SWOT analysis of the green economy in the Himalayan region – Everest Group**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Strength** | **Weakness** | **Opportunities** | **Threat** |
| **How can a low-carbon development (LCD) path deliver growth?** | * Nepal is already a very low carbon development country, there is a low carbon culture
 | * Current tourism sector is not carbon neutral - it has heavy carbon foot print
* Subsistence agriculture
* Stuck with hydro power dream
* Lack of low carbon technologies
 | * Agriculture (growth target 3-5%, LCD opportunity low)
* Tourism (growth target 25%, LCD opportunity high)
* Industry (gone down, growth target 10%, LCD opportunity high)
* Power/Energy (growth target 25000 MW, LCD opportunity high)
* Transport (fuel efficient road, conversion of fuel to renewable, reduce fuel subsidy)

* Expansion of hydro power in energy sector
* Promote eco-tourism
* Increase energy efficiency in industry: brick, cement, metal industries, food industries, use of bio-mass;
* Non-timber forest products in Himalayan region,
 | * Likely social conflicts due to reduction of fuel subsidy
* Failure of growth if international cooperation and cooperation is not realized.
 |
| **How does resource efficiency help the poorest?** |  |  | * Hydro power is labour intensive and will benefit poor people, triggering secured employment.
* Saving fossil fuel revenue will provide opportunity to invest in poverty reduction.
* Eco tourism can provide more employment for local people and benefit the poorest.
* Hydro power success might trigger more fuel efficiencies in industries and lead to more employment opportunities
 |  |
| **How to make GE socially inclusive - bring more people into the GE?** |  |  | * Promote green society - showcase that GE benefits poor and rich equally
* Communicate that GE does not mean sacrificing growth and that it can generate more employment
 |  |

**3. What are countries already doing on green economy?**

1. ***Bangladesh***
	* + National Planning Commission is promoting
		+ Integrated agriculture management to reduce use of pesticide in agriculture
* Distribution of solar panels
* Solid waste management
* Incentives to private sector to use solar energy. It is now mandatory that every Dhaka City housing development uses solar panels.

 ***b) Bhutan***

* Planning to make transport system more green by introducing a tax incentive to buy electric cars, charging less for electricity to charge batteries,
* Promote use of biogas instead of LPG
* Promoting segregation of waste at household level – degradable and non-degradable, and re-use of PET bottles.
1. ***India***
* An environmental information system is being introduced at local and national levels to support decision making
* Establishing awards to recognize contribution of individual or institution
* Capacity buildings for NGOs for water and energy conservation, afforestation, use of indigenous technology, advocacy of environment in government.
* Development Alternatives is working on:
* low carbon pathway in brick sector by promoting clean technology
* promoting resource efficiency practices in 15 state, efficient agriculture and water use.
* Involving communities in implementation of these activities. Himachal - CLAP program for
 carbon neutrality (?)
* SOE reporting – helped in developing environmental information system.
1. ***Nepal***
* ACAP has strongly promoted
* clean energy for 20 years
* ecotourism (with substantial upliftment of socio-economic status of local communities),
 piloting carbon neutral tourism in Gauri Shankar Conservation Area (calculating and trying
 to reduce visitors travel carbon emissions - currently generating data to propose solution.
* Promoting energy efficiency in industry
* The Ministry of Environment has been:
* promoting alternate energy (micro-hydro)
* strengthening the EIA system
* Preparing to celebrate the Environment Day with the UN Slogan – “Green Economy, Does it
 include you?” (the Nepali translation does not justify the slogan as the concept of green
 economy is still not clear in Nepal)
* implementation environmental standards
* banned polythene bags less than 20 microns from May 2012
	+ - Pokhara University is promoting:
		- Plants for bio-diesel
		- Urban agriculture
		- Arun Valley Natural Programme – non-timber forest products with involvement of local communities, established cooperatives to support with funds
		- PEI is developing a green economy framework for planner
		- Kathmandu university is implementing:
			* Carbon negative programme,
			* SustainPRN – fish farming with NARC and Delhi university
		- University buildings have rain water harvesting systems, and use it for washing, and
		 drinking
* Replacement of conventional light bulbs by CFL, powered by solar panels
	+ - Grey water to irrigate reeds - used to produce biogas
* SchEMS is developing a policy and regulation on Solid Waste Management to promote 3R society
	+ - AEMS has organised a regional workshop on environmental mainstreaming and green economy, promotes EIA and is trying to stimulate uptake of SEA
1. **Recommendations and messages to country governments** [notes from final plenary – needs articulating and adding relevant stuff from presentations/working group discussions)
* The main need is to clarify what the concept of GE means to each country, and convince people that GE is worth pursuing . Is it merely ‘old wine in new bottle’ – since it appears very similar to the concept of sustainable development.
* GE can be introduced as an elective course at Kathmandu University (SS) and in SchEMS MSc course on environmental management. Perhaps develop a single course/module on GE? Could be adopted/adapted by other countries. Training course in “Staff College” in GE would help to introduce the concept in government services
* Organise further workshops to explore GE, and continue to work together with our contacts in country and region.
* Need to analyse the threats of adapting the Green economy
* Countries have been pursuing unsustainable growth through liquidating their natural resources – need to stop this practice.
* Governments need to engage much more with the private sector which drive economies – and see how they perceive GE.
* Need to engage in debate with on GE with conventional economists
* AEMS should act as the driver of a network in the region (Green economy forum for Himalayan region?) to examine the GE agenda and how it can be pursued. In this regard, it would help if AEMS could become a member of the Green Economy Coalition.
* Articles are need on Asian country and regional perspectives on GE and should be shared internationally.
* Awareness and capacity building that distinguishes GE from current economy.
* Upscale promotion of renewable energy
* Learn from existing regional GE initiatives
* Regional collaboration in energy efficiency - observation on brick sector in Bangladesh. Equipment from India – need standards for this equipment to ensure energy efficiency

**Appendix 1: List of participants**

**Bangladesh**

Mr. Mamunur Rashid Ministry of National Planning

Mr Anwarul Islam Asia Energy Corporation

**Bhutan**

Mrs. Tashi Yangzom

Mrs. Gaki Wangmo

Mr. Karma Tshering

**India**

Mr. Anand Kumar Development Alternatives

Dr. Satish P. Sharma Commissioner, Environment and Sustainable Development, Government of Madhya Pradesh

**Nepal**

Mr. Binay Bikram Adhikari AEMS/Coordinator SchEMS

Dr. Siddhartha Bajracharya National Trust for Nature Conservation

Dr. Ram Bhandari Pokhara University

Mr. Ashok Bhattarai Under Secretary, Minuistry of Environment

Ms Geeta Dongol aems

Mr. Shailendra Guragain Executive Director, AEMS

Prof. Dr. Anand Raj Joshi Technical Director, AEMS

Dr. Kunjani Joshi Tribhuvan University

Ms. Reetu Kandeel Ministry of Home Affairs and singer

Prof. Dr. Ram B. Khadka Chairman, AEMS

Dr. Uttam Kunwar Federation of Nepalese Chambers of Commerce

Mr. Ajay Bhakta Mathema Director, AEMS

Dr. Madhav Karki Deputy Director General, ICIMOD

Ms. Komal Oli Radio Nepal and singer

Mr. Reshmi Raj Pandey Joint Secretary, Ministry of Local Development

Mr. Surya Man Shakya Solid waste management expert

Yogesh Shakya AEMS

Prof. Dr. Subodh Sharma Kathmandu University

Ms. Nawang Sherpa AEMS

Mr. Madhukar Upadhyay UNDP, UNDP/UNEP-PEI

**UK**

Dr Barry Dalal-Clayton IIED

Ms Emily Benson IIED

**Canada**

Professor Michale Bardecki Ryerson University, Toronto

**Appendix 2: Workshop Agenda**

**Day 1: 3rd May 2012

*Introductions and background - presentations and discussion***

What is Green Economy – an introduction and overview (Emily Benson, IIED)

What is environmental mainstreaming – an introduction and overview (Barry Dalal-Clayton, IIED)

Green Economy for Sustainable Mountain Development – learning and lessons from ICIMOD’s work (Madhav Karki, ICIMOD)

**ICIMO**

***Country experiences of environmental mainstreaming – presentations and discussion***

Nepal

India

**Day 2: 4th May**

***Country experiences of environmental mainstreaming – presentations and discussion***

Bhutan

Bangladesh

***What does green economy mean? (Working Groups - Annapurna and Everest)***

Reflections on:

* What is needed to make the green economy happen? What concerns are there about the GE concept?
* What is driving or impeding/constraining the transition to GE?
* What is the role of environmental mainstreaming?

Plenary – reports from working groups

**Day 3: 5th May**

***SWOT analysis of green economy (Working Groups - Annapurna and Everest)***

Discussion of strengths, weaknesses, opportunities and threats of green economy, considering:

* Low carbon: How can a low-carbon path deliver growth?
* Resource efficient: How does resource efficiency help the poorest?
* Socially inclusive: How can you bring in more people into the green economy, eg marginalised?
* How to measure progress towards green economy?

***Green economy potential in the Himalayan region - plenary***

1. What are you doing already on or related to GE?
2. What GE-related work could your organisation take up (eg establishing research agendas/activities, advocacy, establishing multi-stakeholder forums, introducing/promoting innovations, actions to address SMEs/poor groups, urban catalysts for GE)
3. What could be done regionally by this group/network? (eg to address regional issues, share experience and learning)
4. What messages on GE should we send to (a) national government, (b) international community (eg at Rio+20)