

IGES Submission to ADP Workstream 2

Technical inputs on the Technical Expert Meeting on Land use

Institute for Global Environmental Strategies (IGES), 30 May 2014

IGES is pleased to submit this document pursuant to the request for submissions on opportunities for actions with high mitigation potential, including those with adaptation and sustainable co-benefits, as referred to in decision 1/CP.19, “Further Advancing the Durban Platform,” paragraph 5(a).

This submission¹ aims to provide technical inputs on the improvement of land use change and forestry with the view to raising the level of mitigation ambition by 2020 and beyond, which is based upon the discussion at the Low Carbon Asia Research Network (LoCARNet)². LoCARNet is a practical platform of researchers/research organisations that are making close contributions to individual countries’ low-carbon policy-making processes. The secretariats of the LoCARNet is located in IGES³. This report points out the following issues on land use especially in developing countries; forest and land use issues, forest and land use policy, practices and implementations and challenges, technology and dissemination, community participation, funding system and recommendations for sustainable forest management and land use change.

Summary

- It has come to be recognised that common issues exist within “urban” and “rural” groupings, regardless of borders. It has become equally clear that urban and rural areas require different actions and strategies to reduce GHG emissions. A comparison of emissions sources in urban versus rural areas in developing countries indicates that rural areas have emissions arising most significantly from LULUCF, while some 40% of urban area emissions have their source in fossil fuels. This implies a need for different strategies, focused on energy efficiency and public transportation in urban areas and land use change policy in rural areas. For instant, energy efficiency and public transportation should be developed in urban areas while land use change policy should be the focus in rural areas. Major emission sources/target areas are energy, agriculture and forestry, and transportation
- Changes in the agriculture, forestry and land use sectors are expected to play an important role in GHG emission reductions in Asia at least over the next 15-20 years. These changes are also expected to comprise valuable knowledge-sharing contributions from developing countries in future years, as specific and comparative experiences.

Forest and land use policy to reduce emissions from deforestation and forest degradation

- Governments need to accelerate sector-wise actions including conservation actions for natural resources

¹ http://unfccc.int/documentation/submissions_from_observers/items/7479.php

² The material list is attached in the appendix of the paper

³ For further information on LCS-RNet and LoCARNet: <http://lcs-rnet.org>

through re-habitation and re-forestation.

- It is imperative for the national, local and sectoral levels to carefully design those policy options that impact upon the sectoral level and examine during the planning stage the potential as well as the barriers from economic, social and environmental perspectives with the Agriculture, Forestry and Land Use (AFOLU) model, we can evaluate the reduction targets in 2020 for AFOLU sectors, estimate mitigation costs and identify economically effective countermeasures to meet the reduction target. In addition, the modelling exercise brings up challenges indicating that there is not much time to transfer knowledge and technologies and to develop skills for farmers by 2020. Thus, governmental support is needed to motivate people to accelerate GHG reduction activities, promote technology transfer and introduce market mechanisms.
- The land use policies may affect other sectors. Likewise, the need for land in other sectors affects LULUCF sector heavily. Understanding on those interactions between forestry and other sectors, as well as their policy formations, is essential in designing low-carbon development in Indonesia. Coordination with other sectors' mitigation/adaptation policies must be ensured, e.g. the establishment of new oil palm plantation (agriculture policy related) on forested land (forestry related) must be avoided. For this purpose, conversion of peat land forest for agriculture land (including oil palm plantation) must comply with forest land use policy. Incentives or disincentive to palm oil industries
- Mitigation is already a mainstream of the forest policy (e.g. LUCF and peat fire combined consists of 60% of national GHG emission of Indonesia). It is expected that a decrease of emissions from forest degradation, an increase of reforestation, and the need for agriculture and settlement development will remain constant, and there is a study projecting that the net emission from this sector will begin to decrease by 2020. In some countries, one of the main legal references for forest management are forestry and biodiversity conservation related. Many countries in the region are now developing their national REDD+ strategies, including designing REDD+ safeguards systems and implementing REDD+ demonstration activities

Practices, implementations and challenges to improve land use and mitigate GHG emissions

- Indonesia, for example, faces difficulties in evaluating natural resource conservation actions and inviting investment to back such actions. A green development process enables improvement by using available resources such as natural and forest resources under appropriate management. The government has set new criteria for natural resources, namely that a certain portion of natural resources belongs to the government. This new criteria has resulted in differentiation between rich districts and poor districts. This kind of physical balance policy also triggered cross subsidies among districts.
- Agriculture is the largest sector as a source of emission in many of developing countries (e.g. Thailand 22.6% in 2000). Low carbon and adaptation policies in the agriculture and natural resources sector need to integrate with local communities and draw from their traditional knowledge base. Raising awareness among farmers is important to enhance acceptance of LCS measures. Greening agriculture could be the area that communities could contribute to by adopting organic fertilizer, animal feed, etc.
- Thai Land Use Change and Forestry sector was a net carbon sink (-3.5%) in 2000, and the government

is promoting the expansion of urban forest and public parks. This can be good example of policy coordination and multiple co-benefits, as such measures improve living environment of urban areas, promote tourism, protect erosion, reduce dust, as they are promoted under the Crown Standard

- Timber and other forest product are important for the economy in many of developing countries. Forests also protect watershed and livelihoods of local people. Indonesia has set eight priority areas in forestry, and all of them are related to climate change, either directly or indirectly. Those include: rehabilitation of degraded forest; forest protection, and fire management. Mitigation and adaptation policies will be set at the centre of those priority areas in the next 5 year plan of the Ministry of Forestry, Indonesia

Community participations for land use and forest management to promote GHG emission reductions

- Experiences related to conservation and sustainable management of forests indicate that environmental outcomes will be more sustainable if local needs and meaningful community participation are given greater attention. This understanding is reflected in the decision on REDD+ taken at the 16th Conference of the Parties to the UNFCCC in December 2010, which recognises multiple functions of forests in the context of sustainable development and poverty reduction.
- Community based forest monitoring supports meaningful participation in forest management. There is a need for strong policy support, infrastructures and technology and partnerships among governments, stakeholders and NGOs.
- There are many cases in which communities in developing countries are implementing land based economic activities towards low carbon development. Some barriers restrain the upscaling, replication and improvement of these practices towards a low carbon society. These barriers may include pricing policy, incentives, access to finances, land tenure and access, and knowledge on low carbon farming
- Mitigation within the forestry sector depends on social systems as well as local voluntary actions with social values and views of ecosystems. Therefore, the knowledge of local people in adaptation and natural resource management are important in designing mitigation strategies.
- A key challenge is to design strategies for disseminating knowledge among farmers and local communities for implementing low carbon and adaptation measures via local governance institutions and for coordinating land use policies.

Funding system to improve forest management and land use

- The full potential for emissions reductions will not be realized without strong policy support, the promotion of community-based natural resources management, increased access to finance through the creation of trust funds via public-private partnerships, an expansion of the Joint Crediting Mechanism, and an integrated policy framework.
- Funding mechanism such as REDD+ is expected to provide potential fund to local people to conserve forest land. Many of developing countries expect REDD+ to provide financial resources which is necessary providing actions and incentives which result in emissions reduction, carbon stock conservation and carbon stock enhancement.
- The various funding mechanism is another emerging option for realizing sustainable forest management

and a low carbon society. It is still in the early stages of implementation. Ecotourism also offers a good opportunity as an alternative development model for securing ecological, economic, and socio-cultural sustainability potential, especially in areas rich in natural assets. In order to develop ecotourism successfully, there needs to be strong leadership, sustainable financial support and participation by the local community.

Recommendations for land use and forest management

- Carbon stock loss and emissions due to forest and peat fires are caused by both natural and anthropogenic reasons. Those for anthropogenic reasons, such as traditional practice of clearing land for fishery and safety from wild animals, are associated with the development issues including market, institutional or government failure. Therefore, to tackle this issue, more effective management of production forest as well as a more strategic approach for sustainable peat land management are needed.
- Legal boundaries of protected area must be clarified. Rationalisation of boundaries of production forest would also be effective. Capacity building of production forest management, local community for land management, as well as proper management of oil palm industries are also crucial.

Appendix: References

LoCARNet Annual Meetings

2013	
Enhancing Policies for Supporting Community Actions toward Low Carbon Farming Rizaldi Boer, Bogor Agricultural University, Indonesia	PDF
Community-based Forest Monitoring in REDD+ Taiji Fujisaki, Institute for Global Environmental Strategies (IGES), Japan	PDF
Exploring the potential of a Joint Crediting Mechanism (JCM) in the forest sector Chisa Umemiya, Institute for Global Environmental Strategies (IGES), Japan	PDF
Ecotourism for Low Carbon, Green Growth Mihee Kang, Seoul National University, Korea	PDF
Enhancing Policies for Supporting Community Actions toward Low Carbon Farming Timotheus Lesmana Wanadjaja, International Society of Sustainability Professionals Indonesia (ISSP), Indonesia	PDF
Emissions Reduction in Agriculture, Forestry and Land Use Sectors in the Philippines Florencia B. Pulhin, University of the Philippines Los Banos, Philippines	PDF
2012	

<p>Challenges toward Low Carbon Development: Land Use and Forestry Rizaldi Boer (Bogor Agriculture University), Indonesia</p>	
<p>Towards a Low Carbon Development: Programs and Policies in the Philippine Forestry Sector Florenca Pulhin (University of the Philippines Los Banos), Philippines</p>	
<p>Designing Low Carbon Farming and Challenges for Its Implementation Savitri Garivait (Joint Graduate School of Energy and Environment / King Mongkut's University of Technology Thonburi), Thailand</p>	
<p>Papua New Guinea Initiatives Bruno Kuroh (Papua New Guinea Forest Research Institute), Papua New Guinea</p>	
<p>Implication of REDD+: Opportunity and Challenges for Livelihood Improvement in Local Community, Lao PDR Daovorn Thongphanh (National University of Laos), Laos</p>	