Forest in land use in the tropics: Challenges in their role in climate change mitigation and adaptation (video conference)

Prof. Dr. Markku Kanninen, University of Helsinki, Finnland

Summary of the presentation

Prof. Kanninen is a professor of Tropical Silviculture. Formerly he worked as a scientific director at CATIE, Costa Rica and at CIFOR, Indonesia. Currently, he is a member of the UNFCCC Adaptation Fund Board. He presented his topic via video conference for one hour and also addressed to the queries raised by the audience. His presentation focused on land use change in the tropics in the context of climate change and REDD+. He highlighted on the basic concepts related to forests and climate change including adaptation, mitigation, and REDD+. Trends in forests and land use change in the tropics were shown, where 500 million hectares of forest land had been lost during the last forty years. Conversion of forestland into agricultural land was pointed out as the main cause of forest loss in the tropics. Unfortunately, agriculture expansion in developing countries is growing where USA, China, South Africa and some European countries are investing on agricultural production in the tropics. He provided future predictions of temperature that with the current trend of increase in temperature the scenarios will even get worse by 2050. Scientists focus on maintaining maximum global increase in temperature below 2°C. In this context, he focused on the role of adaptation to reduce the vulnerability of ecosystems and society. In order to reduce adverse impacts of climate change he stressed on the importance of decreasing exposure and sensitivity on one hand and increase adaptive capacity on the other hand. Africa, Asia and some parts of Latin America will be the most affected by the effects of climate change. To reduce such effects and impacts, he focused on local, meso and regional level adaptation. Thus, he suggested for the need of mainstreaming adaptation policies with the national forest policies. Around 12-15% of global emission comes from forest loss and land use change mostly from the tropics where Brazil and Indonesia account for 60% of global carbon emissions from Agriculture, Forestry and Other Land Use (AFOLU) change. India and China are creating global emissions from industrial sector whereas countries like Brazil, Vietnam and Indonesia contribute emissions from land use change. He explained about REDD+ where he highlighted the drivers of deforestation and forest degradation. According to him, the main cause of deforestation is agriculture and the main driver of degradation is timber logging. He gave an example of oil palm plantation in Indonesia and Malaysia where 80% of global palm oil is produced which is the main cause of deforestation in these countries. Deforestation is taking place in the areas that have higher carbon stock like Brazil and Indonesia. He predicted REDD+ might succeed due to financial support or carbon credit mechanism and political will of the donor and recipient countries. Because of the conflicts between the central and local government and corruption there is a probability that REDD+ might not proceed as expected. He concluded his presentation by stating that in order to reduce the effects of climate change, adaptation is needed which is necessary for mitigation . Therefore, we need to prevent future mitigation potential of forests.

Question/Answer Session

1) Indonesia has large population density with limited non-forest land. How can sustainable land management system be applied in Indonesia?

Ans: Investment from developing countries in oil palm and mining and pulp industry is a factor for intense deforestation in Indonesia. The development can be done but we should also address how make the sustainable use of the forest or have restriction on its use.

2) Indonesia is currently at the phase of fastest decline, where will this trend end?

Ans: Palm oil production by Indonesia is competing with that of Malaysia. In order to compete with high productivity of Malaysia, they need to produce oil palm in large areas. This is the main reason behind deforestation in Indonesia. However, it is being tried t slow down the rate of decline by means of REDD+. This can also be controlled by not effecting peat lands and continuous forests having large carbon content.

3) How would you analyze the REDD+ scenario now and in the future?

Ans: REDD+ has become more complicated then plan earlier. Overall negotiation process is slowing down. Institution problem in the recipient countries is affecting the release of money by donor countries. But. however at the local level lot of initiatives have been developed for promoting sustainable forest management. So, this has led to the rise in expectation of local people and as this initiation has taken earlier than the implementation of REDD+ there is a chance that this might also be ineffective as the A/R project of CDM.

4) Developed countries are to invest in developing countries as per REDD+ mechanism, is this investment merely for environment protection or are there any other objectives behind it? How optimistic is REDD+?

Ans: Both the aspects are linked but can also be done in good way. Success of REDD+ depends upon commitment of both the donor and recipient countries. If we are serious, economic development can be achieved also without deforestation. Finland can be taken as a suitable example in this regard. It was one of the poorest countries in Europe hundred years ago but now with efficient forest management and strong will it has achieved enormous economic development maintaining harmony with environment. They have doubled the amount of carbon stock during this period which can also be used as an illustration.

Minute prepared by
Smita Das
Paola Sarela Pozo Inofuentes
Utsab Thapa
MSc TIF