



WRI INDONESIA

## EXECUTIVE SUMMARY

### Workshop

### **Accelerating Action on Forests and Landscape Restoration in Indonesia: Challenges and Opportunities for Enhancing Ecological Resilience and Community Livelihoods**

**Jakarta, 19-20 April 2016**

This workshop, attended by representatives from the government, non-governmental organizations, research organizations and the private sector, had multiple objectives: 1) to discuss the lessons learned from past and existing restoration projects to help accelerate Forest and Landscape Restoration (FLR) in Indonesia, as well as 2) to introduce Restoration Opportunities Assessment Methodology (ROAM). World Resources Institute (WRI) and International Union for Conservation of Nature (IUCN) define FLR as a long process to improve ecological functions and people's livelihoods in deforested or degraded forest landscapes. FLR is also an umbrella term as it covers various types of restoration efforts, ranging from mine reclamation to natural regeneration. ROAM is a flexible, affordable and inclusive framework that will help identify restoration opportunities, including proper restoration intervention and strategies, in a landscape.

#### **Day 1**

#### **Opening**

In their opening remarks, representatives from the Ministry of Environment and Forestry (KLHK) and the Peat Restoration Agency (BRG) both stressed the importance of FLR given the large scale reduction of forest area and the massive environmental degradation. For example, the 2015 forest fires, particularly in the peatlands, emitted more than 2 GtCO<sub>2e</sub> to the atmosphere. Additionally, 27% of the total watershed area in Indonesia is in critical conditions. In response, various policies related to restoration have been put in place by the government, ranging from rehabilitation efforts across critical watershed areas to peatland restoration, with a target to restore 2 million hectares of degraded peatlands before 2020. Both government representatives also expressed their hope that all stakeholders increase their commitments and actions toward FLR. BRG also announced a pledge to contribute the 330 thousand hectares of degraded peatlands within the conservation area that they plan to restore into the Bonn Challenge. This commitment is the first announced by the Government of Indonesia toward the Bonn Challenge, a global movement that aims to restore 350 million hectares of degraded land by 2030.

## **Plenary Discussion**

During the first day's plenary discussion, speakers from WRI, CIFOR, and ICRAF highlighted the importance of resolving challenges to FLR in Indonesia. A WRI informal survey of the workshop participants found that most participants agreed that the primary challenges of FLR in Indonesia include land-tenure and land-governance issues as well as lack of understanding among many stakeholders about the benefits and functions of forests and the importance of environmental conservation. The speaker from CIFOR emphasized the importance of science, not only in terms of measuring the loss of forest areas (especially of wetlands such as mangroves and peat) and the resulting greenhouse gas emissions, but also in terms of restoration techniques. However, he also noted that the social dimension and the human aspect of restoration are also of equal importance. The speaker from ICRAF provided examples of ICRAF-led various restoration projects in three different areas that emphasize the improvement of people's livelihoods. However, considering the three areas have different threats and levels of degradation and deforestation, different approaches to restoration in terms of both technical and social were needed. Social, political and economic restoration, especially after project funding ends, should be considered together.

Following the plenary session, ROAM was presented as a tool or framework that allows the stakeholders to sit together, discuss, and resolve various challenges to restoration in their landscape. ROAM components include geospatial analysis, economic valuation, finance, and resourcing analyses, carbon modelling, as well as restoration diagnostic of presence of key success factors. During the breakout session, workshop participants rotated from one session to another. Each session discussed an aspect of ROAM.

### **Breakout Session on Geospatial Analysis**

At the session on geospatial analysis, examples of how restoration opportunities were mapped in Kenya, Ethiopia, and Malawi were presented. The mapping of restoration opportunities often begins with collaborative efforts among the stakeholders to identify challenges and criteria for restoration, as well as to collect a variety of existing relevant spatial data and statistics. Then, using the restoration opportunities maps of South Sumatra produced by WRI and ICRAF, workshop participants discussed how geospatial analysis for restoration should be conducted in Indonesia. For example, participants discussed the importance of getting appropriate and agreed data sets and filling in missing data with local knowledge.

### **Breakout Session on Restoration Diagnostic Tool**

During the session on restoration diagnostic of presence of key success factors, WRI presented a tool within the ROAM framework that would enable stakeholders to quickly and easily answer questions about the motivating, enabling, and implementing factors for restoration. This tool uses a simple 'traffic light' system to aid users. A CIFOR researcher presented results of the restoration diagnostic that has been completed for Dompas, a village in Bengkalis, Riau. He found that the tool is pretty comprehensive and flexible to be adapted in different landscapes.

### **Breakout Session on Economic Valuation**

The session on economic valuation, facilitated by representatives from WRI and Conservation Strategy Fund (CSF), discussed the importance of cost-benefit analysis prior to conducting restoration. This includes calculation of carbon stock that can potentially be sequestered and potential payment for ecosystem services. Participants deliberated about the use of market-

based and non-market valuations and the necessity of aligning the upstream and downstream sectors in restoration, including to ensure that the market will be available for restoration products. Several case studies from South Sumatra and East Kalimantan were also discussed in the session.

### **Breakout Session on Finance and Resourcing Analysis**

At the session on finance and resourcing analysis, facilitators from IUCN and CSF presented case studies from abroad and Indonesia. Case studies from Indonesia include for-profit conservation activities, concession-based restoration, as well as payment for ecosystem services. Most funding for restoration projects or related activities are currently relying on donors, but both facilitators and workshop participants mentioned the potential for utilizing various public and private financing mechanisms. Most of these have not been widely used because of the lack of incentives and unclear regulations.

## **Day 2**

### **Plenary Discussion**

The second day of the workshop began with a plenary session with speakers from CIFOR, KLHK, and ICRAF. Broadly, the session laid out challenges for landscape-based forest management, especially to conduct FLR, and discussed the application of ROAM in the context of Indonesia. One of the biggest challenges to implement FLR is the lack of coordination between sectors and programs, both at national and local levels. FLR requires strong cross-sector, cross-program and cross-jurisdiction coordination. The integrative watershed management approach as a form of landscape-based management has already been promulgated by the government and regarded as an important foundation for forest management in Indonesia. However, in terms of site-level implementation, the Forest Management Units (KPH) are at the forefront of forestry management, such that the involvement of KPH is crucial in any FLR efforts. At the session, ICRAF also delivered a presentation on the ongoing ICRAF-WRI project to conduct ROAM analyses at the watershed-level in Musi (South Sumatra) and Batanghari (Jambi).

After the plenary session, workshop participants were welcome to choose among the sessions on the application of ROAM in certain priority ecosystems or sectors. Sessions were held on restoration within social forestry, wetlands restoration, and restoration carried out by the private sector.

### **Breakout Session on Restoration through Social Forestry**

At the social forestry session, it was agreed that the potential for FLR from the allocation of 12.7 million hectares into social forestry is very large and ROAM could assist the process to establish effective and efficient social forestry governance both at the landscape level and site level. At the discussion, it was also mentioned that various bamboo species have a high potential to be utilized in restoration efforts through the social forestry scheme.

### **Breakout Session on Restoration in Wetlands**

During the session on wetlands, i.e. peat and mangroves, it was agreed that the success of wetland restoration would rely heavily on the actions taken in the field given that wetlands

restoration is very site-specific. The active involvement of local communities, the inclusion of their knowledge, as well as the technical selection of restoration areas are crucial. It was also noted that the degree of difficulty in restoring wetlands is often higher than in other types of ecosystem. Therefore, BRG must be fully supported by all parties in the implementation of various components of peat restoration, ranging from re-wetting, re-vegetation, through fire prevention. In terms of the application of ROAM, the availability and the integration of biophysical and socioeconomic data should be given more attention.

### **Breakout Session on Restoration by the Private Sector**

Lastly, during the session on restoration conducted by the private sector, representatives from APRIL, APP and FFI provided useful insights. Several components of ROAM, such as the geospatial mapping, have been carried out by APRIL and APP, but both companies have not yet conducted the economic valuation/cost benefit analysis of their restoration efforts, although there are plans to do so in the near future. Restoration by the private sector in Indonesia is largely done through the Ecosystem Restoration Concessions (ERCs), which are given for a maximum of 60 years. Business models and sustainable financing options for ERCs under APRIL and APP have also been drawn up, but to be able to yield net profits in the near future, more government support is likely needed, especially through the provision of tax relief incentives and other innovative mechanisms.

### **Closing**

Prior to the closing of the workshop, WRI and Conservation International (CI) presented the need for a road map or an action plan to accelerate action FLR in Indonesia. In order to succeed, FLR should be flexible enough and become a movement, although it still needs to have both qualitative and quantitative targets and a clear mechanics. To coordinate this movement, a multi-stakeholder forum whose members include key players in restoration is needed. WRI and IUCN will help arrange the establishment of this multi-stakeholder forum in the near future. Among other tasks, this multi-stakeholder forum will map and conduct stocktaking on the situation and direction of FLR in Indonesia, help national and local governments to run FLR strategies, synergize FLR activities, as well as raise the profile of FLR and ROAM. It is expected that this multi-stakeholder forum will be formed by the end of this year.