

# Resilience, Rights and Resources: Two years of recovery In coastal zone Aceh



## Tsunami, conflicts and forestry in Aceh: A brief review

■ Yayan Indriatmoko, Hasantoha Adnan, Heru Komarudin, Yulia Siagian<sup>1</sup>

### Background

Post-Tsunami actions and conflicts resolutions have been the two main efforts in Aceh for the past two years. All aspects of public regulations have been targeted to the post-disaster recovery and reconstruction efforts and to the redevelopment of government structure post-peace agreement (Helsinki MoU, 2005). Related to that, forestry issues in Aceh have as well become part of the discussions.

Tsunami disaster destroyed all aspects of life, from settlements, infrastructure to lands and environments in the coastal areas. People who survived from the disaster are faced by not only the loss of their families and relatives but also the loss of their belongings and livelihood sources.

Compared to many other parts of Sumatera, NAD Province had relatively larger intact forest cover. Many argue that this condition is suspected to be the results of the prolonging conflicts taking place in this province. What actually happened was that the prolonging conflicts caused lack of proper natural resource management.

In its report of Preliminary Damage and Loss Assessment 2005, Bapenas stated that in Aceh the forest cover was as large as 2.3 million ha. BPS Aceh, 2003, as cited in the same report mentioned that the area of paddy rice field was 359.300 ha and the dryland agriculture was 1.2 million ha. Paddy was the main irrigated agricultural produce, or 82% of the whole irrigated lands, while plantation was the main dryland produce (573,000 ha), 80% of which was small-holder plantations. The produces from plantation sector included coconut, coffee, tobacco, oil palm and rubber.

Based on various sources, Walhi reported that forest designation classification in Aceh is as follows:

Forest Status	Luas (ha)
Nature reserve	1.066.733
Protection forest	1.844.500
Production fores	638.580
Total	3.549.813

Tsunami caused damages to coastal environments in the western and eastern coasts of Aceh, which include damages to mangrove forests. Impacts to the more inland forest didn't occur until after much later when timber started to be exploited for post-disaster development.

<sup>1</sup>Centre for International Forestry Research (CIFOR)

Forest management has so far been targeted for timber production. Growing concerns on the decline of timber resources in this area have been the main reason for the emerging opinions to encourage non-timber forest product (NTFP) extraction as alternatives for sources of income for both local people as well as for the regional government. However, there is still a big gap on accurate data, capacity and network on NTFP resources and harvesting, which results in insufficient development in the NTFP extraction although in local level, people have long been involved in NTFP harvesting.

The issuance of Act no. 11/2006 on the Government of Aceh (Undang-Undang Pemerintahan Aceh - UUPA) brings clarity to how the authority interactions among central, provincial and district governments in Aceh should be practiced. However, attention still needs to be given to whether such authority has been focused properly in the field of natural resource management to support sustainable forest management.

### Overview of the effect of Tsunami on forestry issue

The damages in Aceh have occurred not only in coastal environment, covering mangrove forest, swamp forest and coastal agricultural lands, but also in coral reef. Two sectors suffering from the worst damages and causing great impacts to the local economy are agriculture and fisheries. In the Preliminary Damage and Loss Assessment report, BAPPENAS stated that the loss of agricultural land is 69,000 ha, coastal forest 48,925 ha, and mangrove forest 25,000 ha. The damages in the coastal ecosystems have great impacts on biodiversity richness, environmental functions and people's livelihood.

Almost all parties involved in Aceh recovery namely BRR, international organizations, regional government and other NGOs, focus their work on coastal area rehabilitation. The concentration of many aids are on the redevelopment and reconstruction of settlements and public infrastructure as well as on the coastal area rehabilitation.

A year after the tsunami, Ministry of Forestry announced that rehabilitation of mangrove forest was to undertake with the financial assistance of 200 billion rupiahs from ITTO, with the target areas of 600,000 ha. From what happens on the ground, there have been plenty of programs on mangrove forest rehabilitation taking place. In Aceh Barat, district government has been overwhelmed by the high demands of lands for mangrove rehabilitation programs to be undertaken. Quite often overlapping of programs take place in some areas.

As mentioned earlier, the lowland and mountainous forests in Aceh suffered much later, when the needs for timber for the reconstruction increased. UNDP estimates that the total need for timber reaches 860,996 m<sup>3</sup>, or 215,249 m<sup>3</sup> annually, while Greenomics and WWF estimate 1.7 million m<sup>3</sup> of logs and processed timber are needed for the settlement reconstruction (Terms of Reference of Inception Workshop on Timber Information Center, July 2006). The next question would be where to get as much timber as needed. Walhi noted that after tsunami, illegal logging activities increased substantially throughout NAD province. From January to December 2005, 33 cases of illegal logging involving 53 individuals were reported. During that course of time, 33,249.25 m<sup>3</sup> timber was confiscated by the police while approximately 50,000 m<sup>3</sup> was still in the logging sites in Singkil, Tamiang, Aceh Utara, Bireun, Aceh Pidie, Aceh Besar, Aceh Jaya, Simelue, Aceh Selatan and Aceh Tengah.

To date, attempts to fulfill timber needs for Aceh reconstruction are still being sought by related organizations. Walhi, WWF, BRR, Leuser International foundation, and FFI have established Pusat Informasi Kayu - PIK (Timber Information Centre). In the TOR of PIK establishment, the reasons for establishing PIK are: lack of accurate data and information on the forest conditions -- particularly timber resources for rehabilitation and reconstruction--, information gap among related parties involved in the rehabilitation and reconstruction, no existing independent bodies to provide solutions on the problems in timber supplies, high increase of illegal logging activities and gap on the environmental concerns in the rehabilitation and reconstruction processes.

### Capacity building in forestry sector

CIFOR conducted short observation and interview activities in Aceh Barat district, focusing on two objectives:

1. Identification of post-tsunami major forestry issues
2. Identification of the need for capacity building in forestry issues.

These identification efforts are considered important for better understanding on forestry problems emerging after tsunami and during the recovery and reconstruction activities. The outputs of our activities are expected to present accurate information to the related organizations so that they are able to follow up by setting up appropriate programs in accordance with the emerging problems. The capacity building of related parties is as well expected to benefit from the outputs of these identification activities. The programs to be taking place in Aceh are expected to cater not only the needs during the recovery and reconstruction stages but also for wider and long term benefits, for the local forestry offices as well as for the local people.

Initial studies were conducted by reviewing the existing reports on natural resource management in Aceh and by interviewing relevant stakeholders. Those activities were conducted in Banda Aceh and in Aceh Barat district, and the interviews were conducted to the key informants from NGOs, programs, community representatives and government officials. Ground observation was conducted not only in the most affected areas but also in the inland forest, one of them was the protection forest in Sungai Mas, Aceh Barat.

This study also involved two representatives of Aceh Barat district, Esma Ardhani (district forestry office staff) and Indra Syahputra (representative of society of NTFP concessions). They joined the Shared Learning (SL) workshop on partnership and development of NTFP conducted by CIFOR and PILI in Tomohon, North Sulawesi. This SL workshop was designed as joint learning, experience exchange and skills improvement on the practices developed in the collaborative natural resource management framework.

This brief study results in the following learning experience and findings:

1. Tsunami and conflicts are the main factors affecting natural resource management in Aceh. Tsunami has caused damages in coastal ecosystems including mangrove forest, swamp forest and agricultural lands in the coastal areas. Lowland forest and mountainous forest have become highly exploited due to the high increase of timber demands during the reconstruction period. Several initiatives related to this issue have been taken by the government and NGOs.
2. Prolonging politically armed conflicts hampered the natural resource management in Aceh. During that period, the armed rebels dominated the utilization and exploitation of natural resources including forest. Helsinki MOU, 2005, has brought negative impacts to forest, since many irresponsible parties make use of the situation to freely enter the forest and cut the trees, especially because of the high increase of timber needs. On the similar nature, the relatively safer situation has caused large forest conversion to agricultural lands by local people.
3. Accurate data on forestry is needed as reference for the rehabilitation and reconstruction as well as for long term forestry development in Aceh. Lack of accurate data on forest resources (timber and NTFP) affected forestry planning and the set up of forestry policies. During conflicts, armed forces took control in the forestry sectors overruling the roles of forestry offices. In Aceh Barat, some information on the forest were lost along with the damages of forestry offices.

4. Weak coordination and overlapping of aid programs are highly criticized by local NGOs and local government. The criticism points out that most international aids are considered to be unsustainable and, even worse, create people's dependence on external aids/assistance.
5. Political stability is the main key in Aceh recovery, which is also the case with forestry recovery. To date, after the issuance of UUPA ( July 2006), people are still expecting the outcome of Pilkada (regional election). The success and smoothness of this election will inevitably bring political stability.
6. The issuance of UUPA is considered as a good start for Aceh reconstruction, including the development of forestry sectors. UUPA presents clarity on the rights and obligations and authority distribution among central government, provincial government and district government. Related to natural resource management, UUPA gives big portion to regional government, like in Chapter XXI/Article 149/ verse 1 and verse 5 on natural resource management.
7. It remains a question how the UUPA articles (e.g. Articles 149, 150, 155(2), 156) can be effectively implemented to support sustainable forest management. Article 165 ( verses 3b and 3f) which regulates that forest conversion permits and forest management and concession are under the authority of provincial government is interesting to be discussed further.
8. NTFP is considered to be able to play bigger roles as profitable forest resources. From the SL workshop in Tomohon, NTFP is said to have higher potential values for regional income, instead of being only local people livelihood sources. That condition can be reached provided that NTFP resources are managed well, based on the right development strategy and supported by good network of related stakeholders. However, in Aceh Barat, inventory and attention to NTFP resources are still considered insufficient.

### Conclusions and recommendations

This brief study brings up conclusion and recommendations as follows:

1. Efforts to map forest conditions in Aceh are still needed, and those include forest physical conditions, forest status/designation, and the existing forestry problems. Forest database becomes vital in redeveloping forest management in Aceh. It is timely to develop forest database, which can be made possible through the financial aids which are still largely incoming in Aceh. Ministry of Forestry and provincial government should initiate by approaching organizations and programs to jointly start forestry redevelopment.
2. One important aspect in dealing with disaster like tsunami in Aceh is coordination. Aceh disaster has triggered initiatives and efforts from outsiders to assist in the reconstruction. The many programs established to help Aceh need good coordination both at the conceptual level as well as in the implementation processes. Furthermore, monitoring and evaluation mechanisms are as well needed to be developed to allow learning process to take place, including that to benefit the local community.
3. The many ongoing programs in Aceh are expected to consider the sustainability of the actions, community enforcement and environmental impacts. Exit strategy and institutionalization of the program are other important aspects to be developed before particular programs come to an end.
4. Social forestry is originally quite potential in Aceh, but due to the prolonging conflicts, it has been underdeveloped. Post tsunami reconstruction should take this potency into consideration. Several locally-developed natural resource management practices have been established, like gampong and mukim. The local government and NGOs are expected to pay more attention to these practices and include them in the forestry planning.
5. UUPA has given sufficient bases for the startup of sustainable natural resource management planning. Experiences form other provinces in the implementation of regional autonomy in forestry sector, especially related to accountability and capacity building, are useful examples for Aceh government to learn from.

Especially related to forestry capacity building, our conclusion and recommendations are:

1. Capacity building is needed for local human resources to enhance their knowledge and ability in developing forestry databases, methods on data collection techniques and assessments –including Multi-Disciplinary Landscape Assessment (MLA) methods–, and understanding on criteria and indicators of sustainable forest management.
2. Capacity building and skills improvement are needed for the local stakeholders in developing sustainable forest management planning, which incorporates collaborative and adaptive principles. Strategies and implementation on social forestry and NTFP are needed which include technical skills like GIS, participatory mapping and participatory and collaborative shared learning.
3. Facilitation media for the better understanding among various stakeholders is needed, i.e. by the workshop on “Forestry reconstruction in Aceh-post tsunami and conflicts”. This multi-stakeholder workshop is expected to be the starting point to redevelop Aceh forestry sector. Aside from that, facilitation is as well needed for the various local stakeholders to develop Qanun (Provincial Decree) especially for the natural resource management sector based on UUPA (July 2006).

### KEY MESSAGE

The prolonging conflicts taking place caused lack of proper natural resource management.

Forest database becomes vital in redeveloping forest management in Aceh. It is timely to develop forest database, which can be made possible through the financial aids which are still largely incoming in Aceh.

Capacity building is needed for local human resources to enhance their knowledge and ability in developing forestry databases, methods on data collection techniques and assessments –including Multi-Disciplinary Landscape Assessment (MLA) methods–, and understanding on criteria and indicators of sustainable forest management.

Capacity building and skills improvement are needed for the local stakeholders in developing sustainable forest management planning, which incorporates collaborative and adaptive principles.

Strategies and implementation on social forestry and NTFP are needed which include technical skills like GIS, participatory mapping and participatory and collaborative shared learning.

**World Agroforestry Centre (ICRAF)** is one of 15 organizations under the CGIAR (Consultative Group on International Agricultural Research) umbrella. ICRAF aims to stimulate and conduct innovative research, development and capacity building to promote and support agroforestry for both human and environmental benefits. ICRAF has its headquarters in Kenya and six regional offices in the tropics and now cover 21 countries in Africa, Asia and Latin America.

The research bulletins are summary results of collaborative activities of ICRAF and partners in the "Recovery and Resilience of Livelihood and Natural Resources", mainly in West Aceh, after the Tsunami of 26th December 2004. These bulletins were prepared, first in Indonesian language, for a workshop in Meulaboh on 30 November 2006. The primary objective was to share relevant result findings and observations among government and non-government organisations and individuals involved in the post-tsunami recovery in West Aceh. The workshop and preceding research activities were supported by Ford Foundation Indonesia, EU Asia Pro-Eco Program and CGIAR.

#### CONTACT:

World Agroforestry Centre  
ICRAF Southeast Asia Regional Office  
Jl. CIFOR, Situ Gede, Bogor Barat 16680  
West Java, Indonesia  
Tel: +62 251 625415  
Fax: +62 251 625416  
E-mail: [icraf-indonesia@cgiar.org](mailto:icraf-indonesia@cgiar.org)  
[www.worldagroforestrycentre.org/sea](http://www.worldagroforestrycentre.org/sea)