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10 Forest Management in Aceh Province: a Political Economy Perspective

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Introduction

Evidence around the world shows that forestry is often linked with political interventions and economic considerations. Conflicts, war and long-term civil unrests also affect how forest resources are managed. Armed conflicts may affect resources and local livelihoods in positive and negative ways. McNeely (2003) pointed out a positive impact where armed conflict can protect forests in an unintended way. War zone in forested areas can become off-limit to common wanderers, in effect quarantines biodiversity and lifts logging pressures, allowing for recovery of forest products and biodiversity post-exploitation. Conversely, armed conflicts can drive environmental damage, such as where proceeds from forest resource exploitation are used to fund war operations (McNeely 2003; Bruch et al. 2003). Armed conflicts often have negative impacts on communities, creating insecurity, reducing incomes and resulting in loss of local livelihood (e.g., Lanjouw 2003).

The locus of authority over which decisions on forest use are made is an important determining factor in forest use and deforestation (Resosudarmo 2004). Decentralisation, the shift of authority from national to local government levels, has been shown to contribute to increased deforestation (Arnold 2008; Tacconi, Siagian & Syam 2006;

Ribot et al. 2004; Resosudarmo 2004). Moreover, changes of leadership or establishment of new local jurisdictions that prioritize economic development can also mean changes on forest policies and consequently, changes in forest management on the ground (Arnold 2008).

This chapter examines the dynamics of political economy of deforestation in Aceh. Aceh is a highly forested province, with three million hectares of forest cover in 2012 (Ministry of Forestry 2014). Aceh's endowment of natural resources has contributed to the vertical 'struggle' of political control over the province (Aspinal 2005), with significant effects on the environment and socio-economic conditions.

Historical dynamics of natural resource role in Aceh politics

Natural resource management and use in Aceh have had a long history and have played an important role in the trajectory of Aceh's politics. Export of pepper and gold mining during the Sultanate era between the 16th and 18th century has given Aceh a strong influence in global politics (Riddell 2006; Reid 2006). The Sultanate of Aceh (16th century) and the people of Aceh (18th century) fought fiercely against the Dutch who attempted to colonialize it to gain access to its natural resources. In modern times, massive exploitation of natural resources was prolific during the New Order period (1968-1998). The 1970s through the 1990s were described as the "golden era" for oil and gas extraction in Aceh (Aspinal and Crouch 2003). More recently, as is true with other regions of Indonesia, oil palm plantations have gained importance in Aceh's local economy (Konick 2007).

Timber exploitation increased drastically under the New Order regime. Concession licenses were distributed, many of which to relatives of those in power, the military personnel (*Tentara Nasional Indonesia*–TNI), and powerful beaurecrats, to support national revenue (McCarthy 2006; Barber & Talbott 2003; Aspinal 2005). Thus, the proceeds of natural resource extraction by and large accrued mostly to the national government, rather than being enjoyed locally. Indiscriminate extraction of Aceh's natural resources and the

perception of unjust, centrally skewed structure of benefit sharing resulted in local disappointments and exacerbate tensions between the national government and Aceh. They became a significant factor for the emergence of armed conflicts between the TNI and Aceh Freedom Movement (GAM). The armed conflict, which occurred between 1976 and 2004, culminated in a bid for independence.

In 1989, to control this conflict, the government imposes a Special Militarized Area (*Daerah Operasi Militer*–DOM) for Aceh. The fall of the New Order regime in 1998 increased the intensity of conflict. The intensification of conflict pushed guerilla operations into forests, hindering productive activities, including timber harvest by concessionnaires. Post 1998, the Government of Indonesia (GoI) stepped up efforts to end the conflict, by awarding a Special Autonomy status in 2001 that gave the Aceh government authority over a number of affairs, including the management of forests and natural resources. However, the conflict between GAM and TNI continued, leading to an imposition of a martial law in 2003. This pushed guerilla operations even further into the forests. After years of conflict, a historic peace agreement was signed in 2005. The same year also marked the beginning of massive rehabilitation and reconstruction efforts in the wake of the December 2004 tsunami.

In 2012 or seven years after the signing of the peace agreement, natural resource products still played a key role as a source of revenue. The highest sources of revenue sharing came from oil and gas sectors, approximately USD30 million and USD50 million respectively (DPKA 2013). At a smaller scale, local communities remained dependent on natural resources, notably on agriculture. Aceh's fertile land (e.g., McCarthy 2006) is suitable for agriculture: in 2012 this sector contributed 27% of Aceh GRDP and provided employment for 48% of Aceh's workforce (Government of Aceh 2013a; BPS 2013).

The following section seeks to understand the relationships between the complexity of Aceh's political history, shifts in governance, and urgency to recover from the impact of protracted conflicts and the tsunami with Aceh's forest condition. Study by Margono et al. (2012)

shows that, compared to other provinces in Sumatra, islands Aceh's forest in general remained intact. To understand the link between Aceh's political economy dynamics and forest cover, we juxtapose deforestation data with events or policies during 1990–2012.

Deforestation in Aceh

Aceh's land base of approximately five million hectares comprises 18 districts and five municipalities (BPS 2014). Situated in northwest of Sumatra Island, it shares the Bukit Barisan highlands, the mountainous range along the west coast that extends from the north to the southern parts of the island. The Aceh parts of these highlands are distinguished into two main conservation areas, Leuser and Ulu Masen.

This section begins with an analysis on the impact of timber extraction during the last eight years of New Order regime and during the early reform period (i.e., 1990 to 2000). The implications of failed peace process during 2000 to 2003 on forest condition will also be elaborated, followed by a discussion on the effect of the tsunami on the deforestation rate in three periods: emergency response phase (2003–2006); the rehabilitation and reconstruction phase (2006–2009), and the end of recovery phase (2009–2011). Finally, it describes the challenges of forest protection after the completion of recovery projects and the changes in governorship between 2011 and 2012.

Last Decade of New order Regime and *Reformasi* period (1990–2000)

The New Order regime has played an important role in Indonesia's development. In a positive way, it has successfully established Indonesia as a country with political stability and strong economic growth post independence. However, this achievement was not reached without a cost. The development has put a high price on the condition of the country's natural resources and forests; and Aceh was no exception.

Commercial natural resource extraction in Aceh began early under New Order government. Large quantities of timber were sourced from

all over this province, while oil and gas were extracted in the eastern part of Aceh (Lhokseumawe and Aceh Utara). In 1972, not less than IDR12 billion was generated from oil production in Aceh (Boediono and Hasan 1974). The contribution of oil and gas revenue to Aceh's GDP continued to rise, from 17% in 1976 to about 70% in 1989 (Schulze 2007). In the forestry sector, forestry concessions in Aceh generated IDR170 million as early as 1972/1973, a steep increase compared to the IDR10 million in 1969/1970 (Boediono and Hasan 1974).

The timber boom of 1970s and 1980s began to decline in 1990s. However, large-scale timber activities in Aceh continue well into the 1990s. McCarthy (2000) argued that many actors benefitted from the timber business in Aceh during the New Order period. Large-scale timber businesses flourished, employing local people in felling activities. Village and village heads benefitted from the charges/taxes collected from these concessions. GAM provided logging-related services, employed as loggers themselves, or involved in the marketing of timber. Districts obtained funds for district development. Military personnel were involved in the marketing of timber or were owners of concessions themselves (Kingsbury and McCulloch, 2006). The reach of the benefits among the web of relevant actors smoothed the operation of these timber concessions.

Between 1990 and 2000, annual deforestation rate in Aceh reached 35 thousand hectares. This rate can be attributed to at least several drivers. First, the development of mining, plantation and timber businesses to generate revenues for both regional and national coffers. Second, forest management policy that was poorly enforced (e.g., McCarthy 2002). Third, the growing need for land by local communities engaged in agriculture.

The peace process period (2000-2003)

After the collapse of the New Order in 1998, successive government under the leadership of President Habibie ended the DOM status of Aceh, followed by the withdrawal of military troops from the area. As part of the peace process, President Habibie issued Law No. 44/1999 on

Special Status of the Province of Aceh Special Region, authorizing the provincial government to implement Islamic law in Aceh or known as Syari'ah law (Miller 2006). The law divided the Aceh community. One view perceived that it provided Aceh with increased authority over their own affairs, i.e., through the implementation of Islamic Law. Another view, however, perceived that this law was part of the Government's strategy to divert people's attention from its effort to overcome GAM.

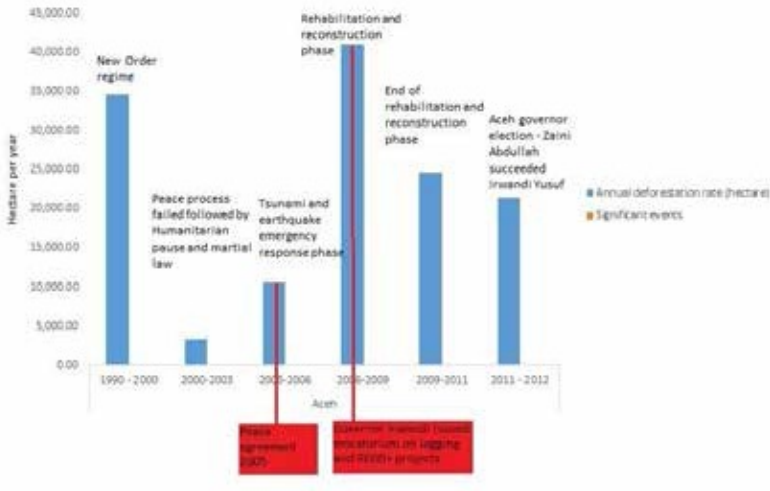
Sensing the half heartedness of the national government in granting autonomy to Aceh, in November 1999 GAM and SIRA (Center for Information on Aceh Referendum), supported by students, human rights organizations and civilians, led a referendum movement for full autonomy. The movement raised panic amongst government and military leaders; and consequently, they stepped up security operations in Aceh. In 2001, the Government under the leadership of President Megawati responded to these demands by issuing Law No. 18/2001 about Nangroe Aceh Darussalam, more known as the Aceh Special Autonomy Law.

The law grants the Aceh government authority to govern the province and to manage its natural resources. Moreover, the law grants Aceh a larger transfer of natural resource revenues, in particular for oil and gas. Despite the provision of increased power, the law did not lessen the tension between GAM and TNI. By contrast, between 2000 and 2003 the conflict intensified, resulting in a number of civil casualties. In 2003, then President Megawati declared a 'state emergency' with the status of Martial Law in Aceh (Jemadu 2006).

In response to the martial law, GAM made forests a key part of their guerilla strategy against the Army (TNI) (Schulze 2004; Schulze 2006). As a result, forests in Aceh became a dangerous zone and effectively off-limits for production or conversion. Any activities taking place in the forests was considered as suspicious by both the military and GAM (interview with key informants, 1 – 10 March 2014). Although the army gave no direct orders to evacuate, the villagers' houses were often appropriated by military personnel to be used as accommodation and base camps.

Villagers were no longer able to depend on forest products as their source of income, because of military’s suspicion of being associated with GAM. Consequently, many locals living in villages adjacent to forests chose to leave their homes and abandon their agricultural lands (various interviews with villagers, February to May 2014). Timber concessionaires in production forests also chose to halt extraction and left the region (various interviews with key informants, February to May 2014). This situation had unintended effects on forests. The rate of deforestation declined between year 2000 and 2003 (Eye on Aceh 2009) (Figure 1).

Figure 1. Deforestation Rate and Political Economy Dynamics in Aceh (1990 – 2012)



Sources: Ministry of Forestry (2014)

After several years of abandonment, forest cover increased in these former agricultural areas (interviews with key informants/villagers in February 2014). Therefore, conflicts not only prevented deforestation, but also increased forest cover. However, deforestation did not completely cease during that period (Government of Aceh 2014). This was because there was still a lucrative market for timber from illegal logging despite the difficulties in getting timber out from the forests. Both GAM combatants and army personnels used timber to help fund their operations (Eye on Aceh 2009). For example, there were at least

3000 GAM combatants hiding in the forests of Seulawah Mountain, some of which sold timber for income (interviews with key informants in April to May 2014). The five to ten cubic meters daily harvest were transported with buffalo cart covertly to nearby villages. One cubic meter of a common type of sawn timber was valued between IDR2 million and IDR2.5 million and for the more valuable Meranti species some 3.5 million per meter cubic (interview with locals, April to May 2014).

Aceh Post Conflict and of Emergency Response Phase (2003-2006)

In 2004, the province was devastated by the tsunami and earthquake disasters. Most activities collapsed and the armed conflict was immediately halted. This calamity led to many changes in the province. At least in the short term, it brought numerous employments for Acehnese and increased economic activities. Politically, because Aceh was immediately open to international involvement in recovery assistance, it provided GAM a means to be heard. In 2005, after three decades of armed conflict GAM signed a peace memorandum which marked the beginning of a period of peace in Aceh. For the first time ex-GAM members held the power to govern Aceh.

Around 100 international aid agencies supported Aceh's emergency response and rebuilding. The emergency response phase occurred from early 2005 through 2006. One of the first priorities was to build wooden-based temporary living centers (TLC) for those who lost their homes. In two months, 800 TLCs were built (WWF 2005).

The signing of Memorandum of Understanding (MoU) between Government of Indonesia and GAM in August 2005 not only ended the conflict, but also paved the way for Aceh to obtain a broader autonomy status. In 2006, the national Government issued Law No.11/2006 on Aceh Government (UUPA). This Law cancelled Law No.18/ 2001 on Special Autonomy for Aceh. The new law grants Aceh the right to formulate Qanun (Provincial level regulations) to govern its community and managed its natural resources.

The signing of the peace agreement also means improvement in security. There were neither military operation nor guerilla activities anymore. This allowed access to forests that were previously avoided. Communities in forest area that had to leave their villages due to conflict, now returned to their villages and abandoned gardens.

Rehabilitation and reconstruction efforts increased the demand for timber, mostly for temporary infrastructure and TLC materials (BRR 2008). This demand threatened Aceh forests. Aceh Forest Service data showed that illegal logging activities increased between 2005 and 2006 (BRR 2008). Several scenarios were considered to reduce the threats to Aceh's forest, such as importation of timber, and application of the provision of legal and sustainable sources (BRR 2008; WWF 2005). However, these policies resulted in the shortage of supplies from legal and domestic sustainable sources, high prices of timber, and difficulties in transportation. Supply from local forests was the most practical solution during the emergency period. Timber was easily produced as now forests are accessible and not monitored. Thus, deforestation increased substantially during this period (2005-2006).

Rehabilitation and Reconstruction phase (2006-2009)

In 2006, the emergency phase stepped up to rehabilitation and reconstruction stage. About 200,000 houses were built or repaired for tsunami victims. In addition, some 250 km of damaged road along the west coast, including bridges and other public facilities such as schools, hospitals, and government offices were rebuilt or repaired (UNIMS 2005; BRR 2006). Around 85% of the timber supply for these rehabilitation and reconstruction efforts came from illegal logging (Budidarsono 2007). Most of the timber was effectively sold to BRR, the coordinating government agency for rehabilitation and reconstruction in Aceh and Nias (*Jakarta Post* 13 December 2007).

In 2006, Aceh held a governor election where, for the first time, several ex-GAM members ran for governorship. Irwandi Yusuf, an independent candidate and an ex-GAM member, won the election. Irwandi was known for his environmentally-friendly decisions and

approaches in the forestry sector through his Aceh Green vision. The first policy was the introduction of a moratorium on logging through Governor Instruction No.5/2007. The moratorium was initiated to provide government of Aceh (GoA) time to take stock, examine the forest status, and increase public awareness about forest protection (Siahaan, et al. 2009). The main target of this policy was large-scale forest concessions (IUPHHK license holders).

The second policy was linked to the outcome of the 2007 COP 13 Climate Change Conference (UNFCCC) in Bali. The Aceh Governor saw the potential of this outcome in supporting the Government's vision. The Aceh Government was immediately committed to forest protection and reducing deforestation and degradation, as manifested in the establishment of Ulu Masen REDD+ project. Moreover, Aceh also joined the Governors' Climate and Forests Task Force.

The establishment of the Ulu Masen REDD+ project was not purely intended for forest and environmental protection. This strategy explicitly sent a message to the world that Aceh was committed to protect and enhance its forest quality, but, at the same time, expected to gain financial benefits to support its economic development (Government of Aceh 2008). The REDD+ project was developed in 2008, covering 750,000 hectares of forests within Ulu Masen ecosystem and encompassed the districts of Aceh Besar, Aceh Jaya, Aceh Barat, Pidie, Pidie Jaya and Bireuen (Government of Aceh 2007).

Most of the forests in the project had been allocated to Protection forests, Nature Reserve and Conservation forests, forests concessions (IUPHHK), timber plantation concessions, or reserved for conversion to other uses. Although these concessions were no longer active on the ground, their licenses have not expired. The project expected to reduce deforestation to 85%; Ulu Masen was selected to continue FFI International's Aceh Forest and Environment Project (AFEP) in the area (Rainforest Alliance 2008). AFEP was established to safeguard the two important ecosystems in Aceh, Leuser and Ulu Masen, from the pressures of rehabilitation and reconstruction need for timber (FFI 2011).

Although initial effort to establish the Ulu Masen REDD+ project began in 2008, the project moved very slowly. Awareness of the project began in 2010. Attempts to reduce deforestation and to tackle illegal logging were implemented through AFEP including through the introduction of alternative livelihoods for illegal loggers and law enforcement by community rangers (i.e., monitoring and reporting logging activities) (FFI,2011).

The moratorium policy did not affect deforestation in Aceh because the primary target was large concessionaires holding IUPHHK licenses. There were 11 units of IUPHHK and 8 units of timber plantation with active licenses. Most of these companies, although still had valid licenses, were already inactive since 2000 due to the conflict (BRR 2008) (see also above).

In contrast, when the moratorium policy was implemented in June 2007, timber demands inevitably increased drastically for infrastructure projects as explained above (BRR 2008). As an illustration, ~~one~~ unit of a permanent dwelling of 36 m² in size required approximately 2.5 to 3 cubic meters of sawn timber (Office of the State Minister for Public Housing, cited in WWF, 2005). It was estimated that at the minimum, Aceh's reconstruction efforts outside infrastructure required 1.1 million cubic meters of logs (WWF 2005).

The BRR was given full autonomy and authority by the President to implement Aceh's recovery process, both from the tsunami and from conflicts (Levine et al. 2014). The situation has indirectly placed Aceh in two contradictory situations. On the one hand, the government of Aceh issued the moratorium on logging and established the REDD+ project, thereby attempting to reduce deforestation. On the other hand, BRR had the responsibility to ensure recovery projects were completed (Levine et al. 2014). BRR did not have many options on the supply of timber. The priority to meet timber needs was higher than the moratorium logging policy and has inevitably contributed to the drastic hike in Aceh's deforestation. Consequently, as depicted in Figure 1, deforestation in Aceh was 40,000 hectares annually between 2006 and 2009. In this case, it is clear that under these circumstances,

GoA's autonomy was not effective to halt illegal logging: rebuilding Aceh took precedence over environmental considerations.

Post Rehabilitation and Reconstruction period (2009 -2011)

During 2009 to 2011, the rate of deforestation significantly declined to about 25,000 hectares annually. This decline can be attributed to at least two factors. First, decreased timber demands. In 2009, rehabilitation and reconstruction activities had slowed down. By 2011, most of recovery projects were completed, thereby lifting pressures of timber need.

Second, there were higher environmental awareness and commitment on law enforcement and forest protection. The Aceh Green vision attracted funding from international agencies to support programmes on safeguarding forests. These programmes mostly engaged local communities and government units in watershed management, forest protection and environmentally-friendly agricultural practices through various training and direct activities (USAID 2008; FFI 2011). Community training increased people's awareness of the importance of forest protection (various interviews with villagers in February to May 2014).

The Aceh Green vision also encouraged and boosted the commitment of relevant district agencies to carry out their mandates of forest protection and enforcement (FFI 2011). For example, nearly half of 369 forest offences recorded in Ulu Masen in 2008 were followed up and resulted in convictions (FFI 2011). Thus, strong commitment from the highest level of government (i.e., Governor) can affect the effectiveness of forest protection and conservation programs.

Change in government period (2011-2012)

In the 2012 regional election, Irwandi Yusuf (2006-2012) lost the battle and was succeeded by Zaini Abdullah (2012 – to date) as the new Governor of Aceh. Zaini Abdullah and the Vice Governor Muzakir Manaf, both from the local party of Partai Aceh, were not new figures in Aceh's political arena. Although these three figures had similar political affiliations and were all ex-GAM members, they now chose separate

paths (IPAC 2015). When the new elected governor came to power, some policies of the previous governor were revoked or not implemented. These included the Aceh Green strategy which was to develop Aceh through environmentally-friendly market based investments (e.g., REDD+). The new governor, on the other hand, promoted other forms of investment in Aceh's development strategy (Government of Aceh 2013a).

As a consequence of the new policy direction, the Ulu Masen REDD+ project was discontinued. Nevertheless, the province continues its commitment on reducing deforestation through the provincial Green House Gas (GHG) reduction action plan (Rencana Aksi Daerah-Gas Rumah Kaca/RAD-GRK) as part of its engagement in the national GHG emission reduction action plan (Rencana Aksi Nasional-Gas Rumah Kaca/RAN-GRK). The moratorium logging policy is also being continued.

Under the current government, the future of forest management in Aceh and GoA's commitment to it is being tested. This is reflected in the case of Aceh's spatial plan (Rencana Tata Ruang Wilayah Aceh/RTRWA). Land within a particular jurisdiction is formally designated according to its functions into two different categories. They are forest lands (*kawasan hutan*)¹ and non forest lands (*Area Penggunaan Lain/APL*). In 2000, following Ministry of Forestry Decree No. 170/2000 on Area of Forest Lands and Waters in Aceh, out of the 5.736 million hectares of Aceh's land area, 3.549 million hectares were classified as forest lands, comprising 638 thousand hectares of Production Forests and 2.911 million hectares of Protection and Conservation areas.

In 2010, under Governor Irwandi's reign, the Province proposed to increase the forest lands area to 4.032 million hectares in their draft RTRWA (i.e., RTRWA 2010-2030) (Government of Aceh 2013b).² Some 1 million hectares were proposed to be classified as Protection Forests.

1) Forest lands or *kawasan hutan* which are mostly forested do not necessarily have forest cover

2) One version of the draft RTRWA, however, suggests that forest land area proposed was only 3.653 million hectares. Available at http://jdih.acehprov.go.id/index.php?option=com_content&view=article&id=132:rancangan-qanun-rencana-tata-ruang-wilayah-aceh-2010-2030&catid=47:rancangan-qanun-aceh&Itemid=320. As accessed on 8 April 2015

This proposed increase, however, was not endorsed by the Aceh parliament. The argument was that the proposal did not reflect reality on the ground as settlements and other activities had already taken place in these areas (Serambi Indonesia 2012).

Furthermore, there was a need to convert or use forest lands for Aceh's development such as for infrastructure and other land-based activities (Serambi Indonesia 2012). With the change in regime, the RTRWA 2010-2030 was never completed and formalized. In 2012, under governor Zaini, Aceh prepared a new RTRWA (i.e., RTRWA 2012-2032). In this plan, 3.351 million hectares of Aceh's area was proposed to remain classified as forest lands. Thus, areas classified as forest lands were significantly reduced compared to the previous draft RTRWA (2010-2030) (*Kompas*, 16 January 2013; Norway, 31 May 2013; Mongabay, 9 October 2014).

In December 2013, Aceh RTRWA (2012-2032) was formalised in a Provincial Regulation (Qanun) (Bappeda Aceh Besar 2014). Apparently, however, the RTRWA (2012-2032) was not endorsed by the Ministry of Home Affairs as corrections were required (Bappeda Aceh Besar 2014). In the same month, among others based on the assessment made by the Spatial Integrated Team (Tim Terpadu Tata Ruang)— a team comprising sectoral representatives and academics tasked with evaluating spatial plans—the Ministry of Forestry issued Ministry of Forestry Decree No.941/2013 that designated 3,562 million hectares of Aceh's land as forest lands.

Out of those forest lands, some 714 thousand hectares were classified as Production Forests and 2,848 million hectares as Protection and Conservation areas. This Decree served as an 'interim' decree before the issuance of the final decree on the designation of Aceh Forest Land and Conservation of Water areas, pending the approval of the House of Representatives (DPR-RI). The GoA consented to the Ministry Decree No. 941/2013 as it was consistent with the proposed RTRWA, in particular on the correction of total forest area changes.

In September 2014, the Ministry of Forestry issued Decree No. 865/2014 on Aceh Forest Lands and Conservation of Water areas. It

designated 3,557 million hectares of Aceh's land area as forest lands, out of which 755 thousand hectares are classified as Production Forests and 2,800 million hectares as Protection and Conservation areas. In comparison to forest classifications that had been agreed to between the GoA and the spatial integrated team as stipulated in Decree No. 941/2013, the GoA identified inconsistencies in this regulation.

Some areas that were designated as Protection Forests were now classified as Production Forests, and areas that were previously non-forest lands (i.e., used as settlements and agriculture) were now classified as Protection Forests. For example, approximately 39 thousand hectares of Protection Forests situated in Aceh Tamiang designated by the Ministry of Forestry Decrees No.170/2000 and No. 941/ 2013 are now allocated as Production Forests by Ministry of Forestry Decree No.865/2014. The GoA expects that the Ministry of Forestry address these inconsistencies before the Ministry of Forestry Decree 865 of 2014 can be implemented in Aceh (Serambi Indonesia 2015).

The difference between the total area proposed as forest lands in the RTRWA (2012-2032) and the total area designated as forest lands through Ministry of Forestry Decrees is not readily obvious. The two levels of government, however, disagree over the classification of forests (i.e., either Protection Forests, Production Forests) or the area of forest lands released for other uses. Areas that remain in the category of forest lands are under the purview of the Ministry of Forestry, while areas of forest lands that are released for other uses are under the authority of local governments. For example, RTRWA 2012-2032 shows that 80,256 hectares of forest lands were released to non forest lands (i.e., for non forest uses). However, Ministry of Forestry Decrees No.941/2013 and Ministry of Forestry Decrees No.865/2014 state that only 42,616 hectares were released from forest lands to non-forest lands (Table 1).

Table 1. *Aceh Forest Changes based on Ministry of Forestry Decrees*

Decree	Nature Reserve and Nature conservation area	protection Forests	limited production Forests	production Forests	convertible production Forests	total Forest land and Water
Ministry of Forestry decree No.170/2000	1,066,733	1,844,500	37,300	601,280	0	3,549,813
Ministry of Forestry Decree No. 941/2013	1,057,942	1,790,256	No Data	714,083	No Data	3,562,281
Ministry of Forestry Decree No.865/2014	1,058,131	1,744,240	141,771	598,365	15,409	3,557,916
Proposal of Aceh Spatial Plan 2012-2032	1,058,329	1,770,729	79,718	574,086	44,451	3,527,313
Proposal of Aceh Spatial Plan 2010–2030	1,058,296	2,719,753	16,429	144,968	93,184	4,032,632

Whereas levels of government continue the process of addressing their disagreement on the classification of forest lands in Aceh, at village levels there also particular dynamics of forest use. In recent years under the peaceful circumstances and post rehabilitation, infrastructures and access to markets in many areas of Aceh have improved. Locals who had left their villages and abandoned their agricultural plots have now returned to their villages.

People living near forest areas, including in forests that formally are under a logging license, began to clear parcels of forests for agriculture. Moreover, illegal logging presents an option for quick cash. Interviews suggest that local people did not perceive there were restrictions to clear land or to fell timber. This is associated with lack of enforcement. In one area, the district head explicitly supported the clearing for forests by villagers to enhance their economy (interviews with villagers in the district of Pidie Jaya, March to April 2014).

Conclusion

This chapter shows the linkages of Aceh's political economy and history with its forest cover. Factors, such as economic dependence on natural

resources, prolonged conflicts, disastrous natural calamity, autonomy, rehabilitation and reconstruction, and change in government have affected Aceh's forests.

Prolonged armed conflicts in Aceh had affected forest cover in two ways. It decreased pressures on forests because entry was severely limited due to security reasons. However, forests were also negatively affected as timber resources were used to provide funds for some of TNI personnels and insurgents. Peace, coupled with relaxed law enforcement, has also affected Aceh's forests adversely. It has driven forest clearing for communities' expansion of agriculture.

To a certain extent forest governance is determined by political leadership. A change in government in Aceh has resulted in a swing of direction of Aceh's forest policy. Despite broad autonomy, there are still limitations on the part of Aceh Government to manage its resources. A significant portion of Aceh land area is classified as forest lands under the purview of the Ministry of Forestry. This means that although the broad autonomy gives the Aceh government the authority to manage its own natural resources, all land-based activities on forest lands are in effect formally "governed" by the national government.

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