Building Forest Assets:
Lessons from Indonesia

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Forestry as a Resource for Development

Indonesia is an extremely diverse country with a population of 220 million people, 300 ethnic groups, 250 languages, and 13 thousand islands. The economic crisis of 1998 that was closely followed by a political crisis brought about change to the political, economic, and social patterns of the country. These new patterns were expected to solve problems of poverty, social conflict, corruption, foreign debt, and democratization.

Forests are the most important natural asset in Indonesia. In the forestry sector, a weakened state encouraged the rise of rampant corruption and forest exploitation, and caused natural disasters. Forests serve the multi-functions of being a source for species and genetic biodiversity, a processing plant, a warehouse for storing carbon, and a stabilizer of global weather.[1] At the local level, the existence of forests guarantees soil fertility and the availability of clean water. Forests also serve as the source of rich forest cultures of communities who live in and around forest areas (1ITFMP 1997, 14-26, 45-50).

Forest assets cover more than half of the Indonesian archipelago's landmass, and serve as the home of 80-95 million people[2]. The government claims that 70% of the country's landmass is state forest, or in other words, under complete control of the central government. Only a limited few are able to enjoy the benefits of forest assets; those who have special privileges because of their connections to certain central government officials.[3] Over investment has resulted in uncontrolled and unsustainable forest exploitation. Meanwhile, the livelihoods of 100 million people living in and around forest areas have extremely limited access to the forests.[4]

Despite the importance of forests, human knowledge of tropical rain forests is still relatively new. It is a shame that the importance of such an asset has only been recognized when it is at the brink of destruction. Studies on tropical rain forests only began as recently as the 1960s, pioneered by Japan and Thailand. Meanwhile, Indonesia has tended to be behind in ecological research on tropical rain forests. One of the first to study forest ecology in Indonesia was the Man and Biosphere Project, a collaborative project between UNESCO and the Indonesian Science Institute, LIPI (Lembaga Ilmu Pengetahuan Indonesia). The project studied the relationship between the ecological system, the social logging system, and transmigration in East Kalimantan.

This research project was a response to the forest destruction activities that began in Indonesia as soon as it adopted a national development system based on economic growth in 1967. The issuance of Law No. 1 on Foreign Investment in 1967, Law No. 5 on Forestry and Government Regulation No. 21 of 1976, was soon followed by the granting of loans by the World Bank and other international financial institutions to exploit Indonesia's forest assets.

One example is in East Kalimantan, where in 1967 the first forest concession was granted to PT Yasa Maha Kerta, a company affiliated with the Indonesian National Army. Many timber companies run by the infamous Bob Hasan[5] were also owned by the Indonesian National Army (Lowry 1996).

It was not until 1968 that the government issued an additional 25 forest concessions. By 1990 the total number of forest concessions had increased to 574 units. The forest assets exploitation

machine reached its gluttonous peak in 1987, when the forestry sector became the second largest contributor of foreign exchange after the gas and mining sector. In 1988, exports of forest products totalled US$300 million (WALHI 1993). However, in 1997 revenue from the forestry sector dropped drastically to US$6 million (ITFMP 1997). The total number of forest concessions dropped in 1999 to 356 units covering an area of 41,839,880 hectares (*Kompas* 5 August 2001, 28). These figures show how the destruction rate of tropical rainforests in Indonesia has resulted in scarcity of timber for extraction.

The deforestation rate in Indonesia between 1985-1988 reached 1.6 million hectares per year.[6] Meanwhile, the total forest cover area was 140.4 million hectares with 18.8 million hectares designated as conservation forests, 30.7 million as protected forests, 31.3 million hectares as limited production forests, 33 million hectares as production forests and 26.6 million hectares of conversion forests (Toha 2000). Using a rate of forest destruction of 1.6 million hectares per year, the forests in Indonesia will become completely extinct in 2082. If we change this formula to follow exponential calculations, however, then by 2008 Indonesia will no longer have any forests left. In six years! The National Forest Inventory states that in 1996 the total forest cover area was only 120.6 hectares.[7] In these two years, the total forest cover area had dropped by 9.9 million hectares per year.

Other driving factors of forest destruction besides timber extraction (including poaching) are forest fires[8], mining,[9] expansion of plantations, and clear-cutting for agriculture land (most often for such commodities as coffee, rubber, oil palm, as well as the opening of paddy fields), transmigration, and opening of agricultural lands. During the 1998 crisis, and even up to the present there has been a trend for urbanites to return to the village because cities are no longer able to be a source for their livelihoods. They have cut down forests to open agricultural lands, effectively contributing to the destruction of Indonesia's forests.

The government's reforestation program, linked to Industrial Forests (Hutan Tanaman Industri) was unable to reach its target because the program is only a front to obtain money from the Reforestation Fund. The Reforestation Fund failed to create a forest industry that was integrated from companies at the riverhead to companies at its mouth. Because the domestic supply of raw materials became increasingly expensive and difficult to obtain, many paper companies chose to import wood chips from abroad. The New Order Regime's failure to develop an integrated forest industry is a monument to its failure to benefit from Indonesia's foreign debt in the forest industry.

To add to the forest industry's mess, there was a misappropriation of Reforestation Fund monies for the airplane industry (PT. Industri Pesawat Terbang Nusantara) and the 100 million-hectare Peat Project. Both projects were ambitious efforts by the New Order Regime to sustain national food self-sufficiency.[10]

Large-scale clear cutting caused extremely severe forest fires throughout the archipelago during the long drought of 1997-1998. Forest fires burned 10 million hectares of forest and brought about a serious smoke haze problem that was felt by most of peninsular Southeast Asia. This disaster was caused in part by the indifference of communities living near forest areas towards the burning of state forests in their area.[11]

Has Indonesia benefited from large-scale forest exploitation? Certainly it has not reaped a meaningful harvest. In 1999, Indonesia's accumulated foreign debt was US$146.939 billion; with a breakdown of government debt totalling US$68.689 billion, total debt of state-owned companies at US$5.067 billion, and private sector debt to the total of US$73.183 billion.[12] Included in the accumulated total is debt owed by the timber industry and forest concessionaires. On top of all of this, irreversible environmental destruction also took place (Rachbini 2001, 15).

With economic growth as the basis for development in Indonesia, people's welfare did not improve. On the contrary, it worsened. Rich countries have drained Indonesia's natural assets, leaving the country with a huge debt. By 2002, UNDP ranked Indonesia at number 110 on its Human Development Index, an embarrassment for Indonesia in the eyes of its neighbors in Southeast Asia.

Ironically, Indonesia has had to repay its debt in installments that are higher than the loans it receives annually. As a developing country in need of increased capital, Indonesia has experienced negative transfer of funds since 1986. International monetary organizations and donor countries seem to disregard Indonesia's inability to manage its debt. Sponsors of the neo-liberal economic regime such as the World Bank seem oblivious to the environmental destruction and social crisis in Indonesia, as they encourage the government to lift the ban on foreign investment in plantations and forestry, and to reduce the log and rattan export duty to a mere 20% of the product's price.[13] This policy is akin to asking Indonesia to rob itself of its natural assets.

An automatic consequence of such a policy is illegal logging and the reallocation of the plywood industry to countries outside of Indonesia. Slowly but surely, Indonesia's timber industry is dying. The economic crisis has hit hard for the Indonesia's timber cartel, APKINDO (Asosiasi Panel Kayu Indonesia), hard. APKINDO was forced to fold, causing the timber industry to move to China with the reasoning that the regulations there are less strict and the laborers are more skilled but cost less.   The relocation of the timber industry has increased the demand for round wood on the world market, driving the problem of illegal logging to an unprecedented scale and making it virtually impossible to solve.

Malaysia and Hong Kong are the main procurers of illegal logs. Malaysia is facing a deficit in the supply of round wood. Meanwhile, Hong Kong acts as middleman for timber trade to China where a nation-wide logging moratorium was put into place in 2000 in the midst of rapid economic growth.

As former leader of the world plywood market for two decades, Indonesia sees the development of China's timber industry as a slap in the face. China is able to sell its processed timber to Indonesia at US$100 per cubic meter, while Indonesia's processed wood is sold at US$200 per cubic meter. But China's round wood originates from Indonesia! A side effect of this is that the furniture industry in Indonesia prefers to purchase processed timber from China (*Kompas* 11 April 2002). Unfortunately, the influx of processed wood from China has dropped the world price of processed wood from between US$500-700 per cubic meter to less than US$200 per cubic meter.

In 1998, the Soeharto's New Order Regime government collapsed as a result of a financial crisis that transformed into a giant wave of reformation. Soeharto's resignation was driven by huge student demonstrations throughout Indonesia, followed by racial riots in Jakarta, Yogyakarta and Surabaya that were initiated by the military. With the resignation of Soeharto, the Indonesian people inherited both debt and environmental destruction. It is important to note that before Soeharto stepped down, forest concessionaire conglomerates had extended their concessions by an additional 20 years.

Soeharto was finally replaced by his protégé, B.J. Habibie, who immediately implemented a strategy to save the New Order regime by ratifying a new package of political and forestry laws.[14] Under Habibie's government, the Department of Forestry and plantations distributed concessions of forests less than 50 thousand hectares to village cooperatives. Habibie's government attempted to revive the popularity of forestry by renewing the forestry law, and enabling village cooperatives to obtain the right to forest concessions. In practice, however, the cooperatives that succeeded to obtain forest concessions were cooperatives created by civil servants and the military. This policy received strong criticism from non-governmental organizations (NGOs) as well as from foresters (ELSAM and CIEL 2001).

The law packages ratified in 1999 were Law No. 22 on Regional Government and Law No. 41 on Forestry. Both laws reflect the stripping down of the central government's power, and the attempt by the central government to wash its hands of the country's debt problem. On the positive side, the laws provided the opportunity for a more democratic government, and provided the space for communities to play a role in decisions of governance. However, the laws also revealed how the central government was relieving itself from its main responsibility for addressing the problem of environmental destruction, particularly forest destruction, and passing the burden onto the shoulders of regional governments.

The politics of regional autonomy have not impacted positively on forest preservation. District Heads, or Bupati, throughout the country followed the strategies used by former President Soeharto to increase regional revenue. Forests have been divided arbitrarily into blocks of 100 hectares each, and local people were then given the rights to log in those areas. The Bupati justify their actions by referring to a land reform program Ijin Pemanfaatan Kayu Tanah Milik (Permit to Utilize Timber on Owned Land). In practice, large businesses collect the identification cards of around 50 local community members, using their signatures to obtain the necessary permit from the Bupati to fell trees in a particular area. Usually, the businesses collect several permits and then log on a wide scale. Clearly, these mini-concessions have not contributed to forest preservation (*Kompas* 16 March 2002).

Occasionally, raids are conducted to arrest illegal loggers. The confiscated timber is then auctioned off, usually falling into the hands of the very people behind the illegal logging in the first place. The auctions then may be simply a strategy to launder illegal timber. It is indeed possible that concessionaires are behind illegal logging practices with the support of regional government (*Kompas* 5 August 2001, 29).

The above illustration gives a snapshot of how the third largest rain forest in the world is being destroyed by an authoritarian government to pay for the capitalist development of Indonesia. Indonesia, like the Philippines, Thailand, Malaysia and Nigeria, has become an importer of timber (Jacobs 1988). The following section attempts to illustrate how community forestry can play a role in the current situation of Indonesia's forests based on the situational analysis provided above.

Komuniti Forestri and Social Learning

Can community forestry, or Komuniti Forestri (KF), become a simple way to deal with the complexity of Indonesia's forestry problem? The inability of the government to overcome Indonesia's environmental and economic crises quickly awakened awareness of the value of reviving the power of local communities.

The concept of KF offers an integrated, particular, area-specific, contextual and national integration approach to forest management. For this reason, KF has to be introduced, understood and promoted to help communities face their crises and the mounting social disintegration in Indonesia. It is expected that KF will be able to restore the harmonious balance between people and nature, between ecology and the economy, and integrate other aspects of life such as civil society, democracy, morality, culture, and spirituality.

In Indonesia, at the beginning of the 1980s, KF took the form of seed cultivation and tree planting activities by local communities. This approach makes sense in the context of the state of forestry at the time and the demand for firewood in rural areas. The government introduced several reforestation techniques such as ally cropping, mixed-multipurpose cropping, agro forestry, silvi-pastoral, and watershed management systems.

The Government of Indonesia prefers using the term social forestry instead of community forestry. In the eyes of government, social forestry is interpreted as forest management with a social façade. In other words, continuing to focus mainly on forest management by the state and private businesses, then donating a small portion of the profits to poor communities living near the forest.

Is this concept sufficient? A.J. Leslie (1987) states that social forestry is the system of community-based forest management with the weakest political and economic position. In addition William R. Burch Jr. (1992) points out that long before the Europeans understood forestry, local communities in Asia were sustainably managing their forests, which were the source of their cultural values, beliefs, and art. Such differences in approach and understanding of the concept of forestry resulted in the making of inaccurate forestry policies by third world country governments, including the Indonesian government.

By the end of the 1980s, variants to KF began to be adopted in Indonesia's forest policies, such as: HPH Bina Desa (Village Development Concession) in 1991, Pembinaan Masyarakat Desa Hutan (Forest Village Community Development) in 1995, Hutan Kemasyarakatan (Social Forestry) in 1995, Kawasan dengan Tujuan Istimewa (Special Purpose Areas) in 1998,

Pengelolaan Hutan Bersama Masyarakat (Forest Management with Communities) in 2001, and
Pengelolaan Hutan Berbasis Masyarakat (Community-based Forest Management) in 2002.

Foresta (1998) introduces the concept of agro-forests as being complex communities of plant
life, dominated by trees with similar characteristics to a natural forests, yet not gifts of nature,
but human artifacts instead. Foresta's brilliant description shows that poor and simple
communities living in forest areas are sophisticated in developing human made forests.
Scientists, decision makers, and the general public are often fooled into believe that the agro-
forests found along the coast of Krui and Lake Maninjau (Sumatera), and the inner areas of
Kalimantan and Jambi (Sumatera) are natural growth forests. Even the government is convinced
that the damar gardens in Krui are natural growth, officially mapping those areas as shrub
forests, justifying their plans to transform them into palm oil plantations. It is difficult for the
government to perceive that agro-forests are the result of crossbreeding between natural forest
systems and community agricultural systems.

A Bridge to Good Forest Governance

Indonesia's current forest crisis is not simply a side-effect of the country's political crisis and
global climate change. The roots of the forest crisis are the behaviour, institutions, and
management systems that have been monopolized by the state. This state-based forestry
management regime gives authority to the state to control, own, and manage the country's forest
resources, automatically cancelling out all claims by local communities and indigenous
communities.

The right of the state to forest resources is often interpreted as the state as having the highest
authority over forest resources. Because the state has the right to control, it also has the
authority, (1) determine and control the planning, allocation, provision, and use of the forest
according to its functions to provide benefit to the people and the state; (2) to control the
management of forests in the widest sense; and (3) determine and control any legal issues
pertaining to the forest and control any legal action that is forest related.

The broad authority of the state to control forests has created unique behaviour, institutions, and
management systems. As far as the government is concerned, the relationship between forests
and the state, forests and the people, the state and the people are strictly economic. The
commoditization of the forests generates behaviour of state apparatus that are short sighted,
unilateral, focus mainly on generating national revenue, and follow rigid planning processes.
This behaviour is further supported by government institutions that are centralistic, and target-
oriented, with large departments, tight budgets, and a readiness to penalize. Additionally, the
forest management systems are characteristically uniform in terms of objectives, products,
methods, and technology.

It is this paradigm that is being challenged. Over the past fifteen years, there have been dramatic
changes in how forest resources, local communities, and forest management are viewed. This
shift has encouraged the rise of new proposals for managing forest resources in several countries.

In _____, Campbell (????) states that we have come to an important point in the evolutionary thinking of forestry, from an ecological perspective that tends to look at long-term forest conservation to a social perspective that tends to emphasize the role of forests in sustainable development. One of the most dramatic realizations is the emergence of a new awareness about forest communities as having the most interest in forest management. Signs of change actually began with a suggestion to the government to involve local communities in the business of managing the forest. Currently, KF as a project has metamorphosized into a demand by communities to obtain official access to forest areas and resources.

From a more strategic perspective, KF developed because empirical evidence showed that without local people's participation, forest management is ineffective. The government's development funds are limited, and it is facing the pressure for economic liberalization from national financial institutions caused by the prolonged economic crisis. Coincidentally, KF is emerging as a people's movement, or civil society movement, signified by the increase in local and indigenous communities demanding their rights over forest assets. Such demands have resulted in conflicts in a number of areas between people and the state over forest assets.

KF can no longer be seen as a simple form of practicing local specific forest management. As a government program, KF has become an international issue that is related to the role of the state, the free market, and biodiversity preservation. The involvement of local communities in the planning and implementation of forest management at present is an important issue in debates at international fora such as Intergovernmental Panel on Forests and the World Summit for Sustainable Development.

Some international forest experts are of the opinion that a global transition is taking place currently in forest asset management. This is indicated by the increase of countries in the North and South developing policies and mechanisms for local community participation in forest asset management. There are many approaches and terms used to express these new ways of forest management. Such as, community forestry, joint forest management, collaborative forest management, participatory forest management, community-based forest management, and social forestry. Mixed use of terminology is a serious problem. The government has already used a confused interpretation of the new forest management approach, limiting social forestry to reforestation and charitable activities. Community forestry is seen as part of social forestry whereby forest concessions are given to cooperatives and limited authority is given to village communities to manage the forest. Such a confusion of terms results in policies that are flawed and inoperative in the field.

Community forestry emerged as a concept that challenges government policies that bluntly disregard indigenous community rights and refuse to be responsible for ecological and social damage caused by the destruction of forest ecosystems throughout the archipelago. In addition, the state has arrogantly continued to generate forestry knowledge that directly ignores indigenous communities and local knowledge. Academic institutions and the media have been used by the state to disseminate unbalanced views and knowledge on forestry. The state holds the control and monopoly over forestry knowledge.

The forestry knowledge developing and spreading throughout the forester community in Indonesia focuses on how to control forest areas for national revenue and on the forest itself. According to Nancy Peluso (….), Indonesian foresters have what she refers to as a culture of control over forest resources. Peluso states that the ideology of forestry science introduced by the colonial government and foresters has consciously disregarded local institutions that have access and control over forest areas. People's access and control over forest resources were gradually erased from the content, structure, and process of law.

That ideology remains dominant today. The last forestry laws implemented by the Dutch Government were designed at the end of the 1920s, and have continued to be the framework for Indonesia's Forestry Law No. 41 of 1999. The culture of anti-community control has been the largest obstacle to changing Indonesia's forestry paradigm to one that is based on local knowledge.

Conflicts between the people and the state over forest resources have intensified and become prolonged. The state's claim over customary lands have increased and spread local communities' defiance of the rules that control their access to and control over forest assets. Politically, the government still refers to them as forest encroachers. These forest asset conflicts can easily cause a revival of ethnic politics and increased demands for more autonomy in managing natural assets as is happening throughout Kalimantan.

As collective actions, forest-related social movements do not only represent the organized struggle for local autonomy and control over natural assets, but are also redefining their local knowledge of the forest. At the end of the day, these civil struggles are aimed at fighting for community rights over land and forests.

If the government does not respond wisely and in line with community demands, forest asset conflicts will continue to spread and become more complex. KF as the people's interpretation of the how forests in Indonesia should be managed needs to be given the space to respond. Why? Because local communities need a guarantee for their well-being. When the government coffers are filled with money, it may respond by dispersing projects throughout rural areas of the country.   However, the coffers are now empty, and the time has come for the state to take a radical development approach; to change from an income-generating model to a forest asset redistribution approach. The time has come for the forest to be redistributed to the people.

KF provides the opportunity to develop a process for redistributing forest assets to the people. KF is not a single approach, but rather a combination of diverse approaches that is relevant to the political, economic, social, cultural, and ecological context of an area. The definition of KF as a crisis solution is as follows:
- KF is the management of natural and human-made forests at the local level using methods that are appropriate with local objectives and values.
- KF contains a number of government regulations that relate to the involvement of local peoples in managing forests at the regional and central levels.
- KF is a form of forest management that simultaneously links environmental, economic, and social objectives.

- KF is a pattern for forest asset management that involves all interested parties in the same area.
- KF is an agrarian reform program for farmers and farm laborers.
- KF consists of new interventions that are being developed and still to be identified.

There are a number of specific trends that characterize the evolution of KF as a methodological and conceptual progression of ideas. The strengthening of this concept is supported by social scientists who play a significant role in influencing the thinking of forestry professionals and provide a better understanding of KF. Unfortunately, the development of KF in Indonesia has been very slow, lacking innovation, and in fact, with a tendency for involution. This can be seen from the lack of a national strategy among decision-makers within the Department of Forestry, donors, and NGO activists, as well as scientists to nurture KF in its infancy and help it grow.

As a result, many regulations and policies are drawn up using the old framework of social forestry, forest management with communities, or community-based forest management. The government has unilaterally developed an understanding of KF and issues related to it. On the other hand, there are KF activities developing in Indonesia that are being initiated by local communities, NGOs, universities, and international organizations. Field studies reveal that errors occur between the conceptual and implementation levels. A number of locations in the country prove that local communities are capable of sustainably managing their forest assets.

In an effort to counter the betrayal of the concept of KF, it is now necessary to reconstruct forest management through changes at three levels: institutional change, organizational change, and process change.

What is institutional change? Institutional and policy change emphasizes the change in roles, authority, and processes that govern the relationships between institutions and the public, and among different institutions. Institutional change means changing the architecture and relationships among government institutions in terms of policies, legislation, and the government structure, as well as in improving the coordination of government institutions.

Some of the tools for institutional change are:
- Pluralistic service systems (e.g., the privatization of the role of the state, clarity of the roles of NGOs, the private sector, and new organizations).
- Civil society strengthening through supporting peoples organizations (e.g., Village Forest Committees).
- Renewal of relationships between the government and peoples' organizations, the private sector, and other non-governmental parties (e.g., multi-stakeholder agreements, improvement of service standards, transparent tender processes).

What is organizational change? Organizational change is easier to accomplish because there are clear boundaries and management, for example in the case of a project. Organizational change aims to renew all organizational components, such as the mission, process, structure, human resources, and organizational behaviour or culture. Organizational change has two dimensions: (a) strengthening capacity, based on the assumption that the organization's limitation to achieving its mission is weak human resources, and (b) repositioning, under the assumption that

radical repositioning may be required when an organization defines a new strategy and new program in line with the institutional changes taking place.

What is process change? Process change emphasizes systems and procedures that enable an organization to function. If organizational change highlights changes on the hardware of an organization, process change highlights its software. There are many processes and procedures that need to be changed. Ultimately, there are two important process changes that need to take place: (a) changes in the primary process between the state apparatus at the local level and the local community; and (b) changes in secondary processes, which cover other processes that support the state apparatus at the field level, i.e., the planning, budgeting and career systems. These secondary process changes have to be interlinked to support changes in the primary process. Process changes do not automatically alter the structure of an organization or bring about institutional change, as new processes require new skills, behaviour, structure, and management style.

The three types of changes above can be accomplish by following a series of approaches as described below (Hobley and Shields 2000, 24):
- Provision approach – focuses on increasing human resource performance and public service agencies.
- Public Choice approach – focuses on improving individual and community roles in decision-making mechanisms and public policy.
- Governance approach – focuses on changing the roles and responsibilities of various communities and the government within a power relationship mechanism between stakeholders to define new roles, rights, and responsibilities.

The provision approach usually invites a third party or consultant to increase human resource capacity and organizational performance. This approach tends to benefit the consultant because his/her knowledge increases with the experience obtained while conducting the consultancy.

The public approach usually faces a dilemma when the time comes to determine who will be representing the weaker parties, or defining whom the public is, or whether the public is really provided with rational choices. This process helps improve the quality of decision-making.

In the governance approach, what is important is not simply improving performance or the quality of decision-making, but rather how to manage change to become something different than it was before. Why the need for something different? The governance approach recognizes changes at the two main poles of forest asset management, i.e., change in the ecological system and change in the social system. Change at these two main systems cause complexity and uncertainty. As a result, the system, which manages the relationship between those two systems, requires on-going supervision and tuning that involves all parties.

There are six key relationships that need support for change, as indicated in Figure 1.[15] These relationships are defined as follows:
1. Relationship between local community and village government. What needs to change is the access to information and political representation (inclusive decision

making processes, conflict management, and community forest boundary negotiations).

2. Relationship between local community and state apparatus or forest department apparatus. What needs to change is the development of participatory processes for creating a pluralistic forestry system that involves the private sector and NGOs.

3. Relationship within and between government agencies. What needs to be changed is the coordination mechanism between departments, the creation of a unified vision, a cross-sectoral strategy framework, and a more holistic and integrated terms of reference.

4. Relationship between the executive agencies and political structure. Improvements need to be made to the information system, participatory forest planning process, transparent decision-making process, communication, and the formulation of a new mandate.

5. Relationship between the local community and the political structure. The change that needs to happen is the strengthening of civil society and the political structure – mass media, political parties and parliament – in the context of forest issues.

6. Relationship between the government and political environment. What needs change are the external forces that influence the sustainable management of forests and community well-being, such as globalization, foreign debt, decentralization, democratization, lifestyle changes, and global climate change.

Figure 1. Change Towards a Pluralistic Forest Management System[16]
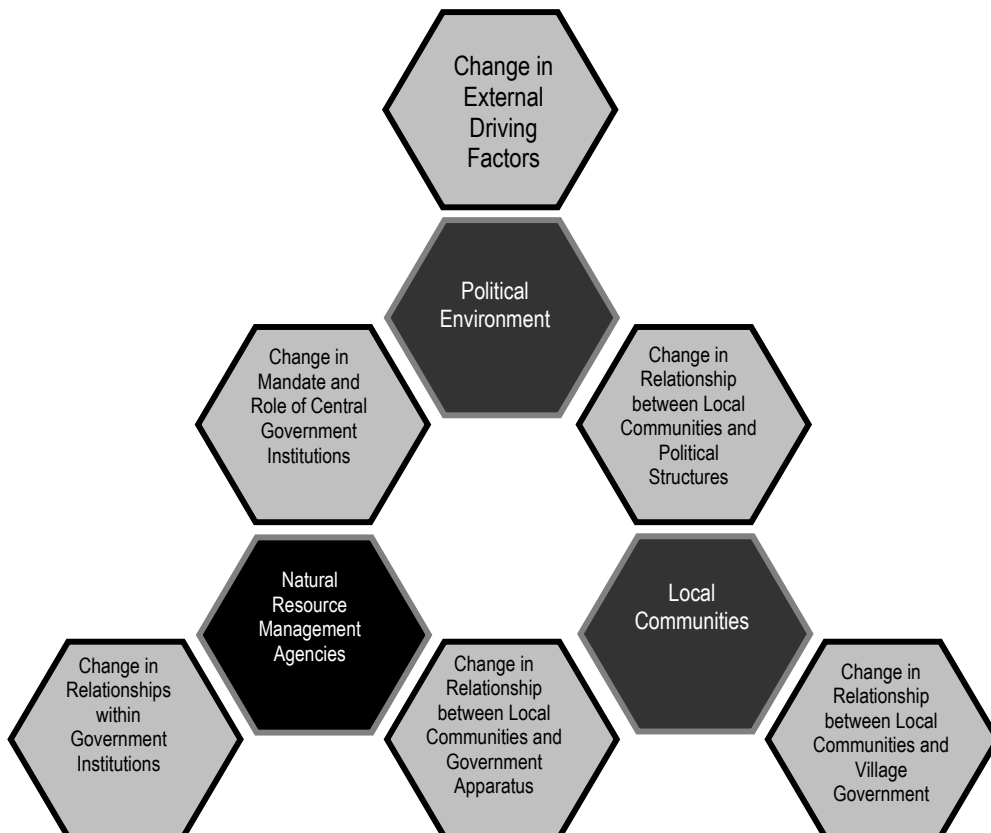
The diagram above describes how forest issues and village reform are inseparable. Similarly, the forest cannot be seen separately from issues of globalization, decentralization, organizational change and process changes currently taking place. The implication of the governance approach, therefore is the need to understand the multiplicity of forests.

The diagram shows the multi-directional learning processes that take place between the actors and stakeholders of forest asset management. The first lesson concerns how the government increases local community participation in forest asset management. The second lesson concerns how the local communities as forest asset managers are able to formulate public policy and determine who will implement those policies. Two-way vertical political communication like this can guarantee the quality of the concept and implementation of sustainable and just forest management.

A Pluralistic Forest Management System challenges the double standard and unsustainable partnership between the government and local communities. It is argued that developing a pluralistic forest process requires at least three stakeholders, so that one party can act as mediator should conflict arise between the government and the local community. The role of each organization has to become increasingly clear, since no organization alone can manage and control the entire forest asset management process.

Global trends also drive the emergence of autonomous groups and actors in the forest asset management map. The pluralistic approach is concerned about such trends, as well as with understanding a multi-regime forest asset management system. These trends include:
- Change in Forest Asset Ownership Patterns: Sustainable forest management must take into account the power and management patterns over land upon which trees grow. Initially, forest assets were controlled and managed solely by the government for a single purpose. Now, forest assets are controlled and managed by hundreds – sometimes thousands – of actors and groups, as well as independent associations that all have their own objectives. For example, in Eastern and Central Europe since 1990, forests have one million new owners (FAO 1997).
- Decentralization Politics: The decentralization process is an effort to promote local political power and regional government administration that is independent from the central government. In addition, this process encourages the emergence of new centers of power. According to Kaimovitz (1997), decentralization in Bolivia succeeded in driving the decision-making process and regional financial system for sustainable forest management. On the contrary, in Indonesia decentralization has created a situation of 'tragedy of open access' because of the absence of central government control, and escalation of illegal logging. The decentralization process has not provided a political and economic arrangement that can secure forest sustainability.
- Democratization and Multiparty Politics: With the destruction of the central government's power, came the founding of numerous political parties with various agendas. Diverse political party interests have impacted upon the existence of forest assets in Indonesia. During the last elections, many political party funds originated from logging conducted in state forests.

- Shrinking of Government Responsibility: Pressured by limited national funds and an economic crisis, the government has had to privatize to reduce its burden. The process of economic liberalization has forced the government to concentrate only on its main function as a service provider. It has also meant that many governance duties have been handed over to both for-profit and non-profit non-government bodies.
- Demographic Transition: The social change of rural communities to urban communities has created differences in interest with regard to forest assets.
- Separation of Functions: Forest asset management institutions often face difficulties in integrating contradicting and diverse forest functions, such as development and conservation, production and protection, or implementation and monitoring. These institutions usually serve as both judge and jury, and reforming them is necessary for organizations to be separated by to their respective functions.

Another interesting trend is how civil society or NGOs no longer take action only on issues that the government is incapable of dealing with, but are now actually decision makers and can determine the direction of certain programs (Vira 1997).

The pluralistic approach to forestry can be understood as two conflicting ways of thought. According to the first way of thinking, there is only one rational value system for the sustainable management of forests and village reform. This way of thought is adopted by experts who have authority such as forestry officials who produce 'the truth'. In the second way of thinking, all value systems are situational, contextual, and particularistic. Both viewpoints can be criticized, since neither provides a satisfactory analytical nor operational framework, and nor portrays the diversity of beliefs and preferences. In essence, the pluralistic approach to forest management believes that there is no single solution to address the complexity and uncertainty of value systems within the issue of forest asset management.

There are several key concepts for implementing a pluralistic approach to forest management:
(1) each different group has different experiences, positions, opinions and objectives of sustainable forest management and village reform;
(2) each group is autonomous and independent;
(3) there are no single, absolute, universal, and permanent solutions that can address all issues of sustainable forest management;
(4) no single organization can claim that it has superiority because the decision-making process is no longer the territory of officials or experts;
(5) forest asset management cannot be solved, but can be managed;
(6) ensuring justice in the decision-making process is vital;
(7) mediators and facilitators are needed to build an healthy ??;
(8) communication is very important to understanding the existing differences; and
(9) consensus is also very important, but some decisions can be made without consensus.

A pluralistic approach to forest management will encourage a healthy process of multi-stakeholder dialogue whereby differences are respected. Eventually, this approach will increase the capacity of and provide security for local communities in mobilizing available local resources, so that they can be used productively, justly and sustainably to meet the needs of all community members. Alternatively, in situations where community forestry has yet to develop,

a pluralistic approach to forest management can become a tool to expand community forestry practices.

Pluralistic forest management recognizes the new roles and responsibilities of all parties who have an interest in forests assets, by continuously developing institutional and policy innovations, organizational innovations, and social process innovations. Non-stop innovation is a prerequisite to constructing power relationships between the main actors of forest management. Efforts to create good and democratic governance involve hard work in changing power relationships between communities, regional and central governments, and the private sector to become accountable, transparent, fair, and democratic. At the end of the day, pluralistic forest management will make the forest asset concept a reality, through guaranteeing the quality of physical assets, such as rivers and roads; social assets, such as social safety nets and local institutions; human assets, in the form of local knowledge and gender justice; financial assets, in the form of open access to local markets and financial institutions; and political assets, in the form of participation in decision-making processes.

Endnotes

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[1] A extensive description of the functions of the tropical forest can be found in Hurst (1991) and Jacobs (1988). Through the process of photosynthesis, young trees absorb carbon and at an older stage retain carbon. Trees' capacity to absorb carbon and produce oxygen ensures the reduction of carbon dioxide in the air. It is believed that the increase of carbon dioxide in the air is a result of humans' industrial activities, resulting in the acceleration of the greenhouse affect and global warming.

[2] For an estimation of the number of people whose livelihoods are dependent on forest assets, see White Martin (2002).

[3] In 1994 there were 585 forest concessions; 228 concessions or 45% of concession forests were owned by 10 conglomerates.

[4] According to the Multistakeholder Forestry Programme of United Kingdom's Department for International Development (DFID-UK), 50 million people live below the poverty line and another 50 million lives are threatened to slide below the poverty line (DFID-UK 2000).

[5] Mohamad 'Bob' Hasan, former Chair of the Indonesia Association Timber Panel and Minister of Trade and Industry, is also referred to as the Timber Tycoon and is currently is serving a prison sentence for misappropriation of reforestation funds.

[6] Under the UN definition, Indonesia's forest area is much smaller than defined by the Indonesian government. Independent experts state that in 1983, Indonesia's forest area covered 94 million hectares (Hurst 1990). Meanwhile, the Government of Indonesia uses a definition of state forests under which such areas do not necessarily have to be covered by forests. Under this interpretation, Indonesia's state forests remain the same despite being completely deforested.

[7] Data collated from the Forest Planning Agency (2000) states Indonesia's forest area as 120 million hectares (*Kompas* 5 August 2001).

[8] Data from Bappenas (National Planning Agency)/ADB (1999) states that forest fires in 1997-1998 destroyed an area of 9.7 hectares, affected 75 million people and cost US$9 billion in damages.

[9] According Jaringan Advokasi Tambang (Mining Advocacy Network), by 2002 the mining sector's contribution to forest destruction reached 10 percent. To date, 37.5 percent from all mining works contract areas are within protected forests (*Kompas* 11 April 2002).

[10] The airplanes produced became a hot topic of discussion because they were then bartered with glutinous rice from Thailand. The peat swamp project, on the other hand, was a panicked effort of Soeharto to produce rice on a wide scale because 1 million hectares of fertile land in Java had been converted into industrial areas, housing complexes, and for urban expansion.

[11] For a comprehensive argument on this issue, see Suyanto and Applegate (2001).

[12] Former President Soeharto, at the opening of the local market 'Pasar Klewer' in Solo in 1971 boasted that he would be able to repay Indonesia's foreign debt by exporting timber (Ramadhan K.H. ????)

[13] Notes from a seminar on Indonesian forestry entitled *Removing the Constraints: Post-Consultative Group Meeting on Indonesia, Background on the Forests* held in Jakarta 26 January 2000.

[14] During a *Dialogue on Forest Management Policies* in Jakarta (10 March 1998), NGO activists proclaimed that the Draft Regional Government Law being discussed at the time by the House of Parliament was not formed by the appointed Reformation Team, but rather put together by a 'ghost team'. Similar conditions were also found in the Department of Agriculture and the Department of Public Works (Hariadi 1999).

[15] Adapted from Hobley and Shields (2002).

[16] This diagram was used as an analysis framework for the Good Forest Governance in Asia initiative that is being supported by a number of organizations in India, Nepal, China, Cambodia, Vietnam, Filipina, Thailand and Indonesia.