The Impact of Special Autonomy on Papua's Forestry Sector

Empowering Customary Communities (*Masyarakat Adat*) in Decentralized Forestry Development in Manokwari District

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Printed by Inti Prima Karya, Indonesia

ISBN 979-3361-98-0

Published by
Center for International Forestry Research
Jl. CIFOR, Situ Gede, Sindang Barang
Bogor Barat 16680, Indonesia
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E-mail: cifor@cgiar.org
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Glossary

<i>Adat</i>	Customary or Indigenous
CBFM	Community-based Forest Management
CIFOR	Centre for International Forestry Research
DR	<i>Dana Reboisasi</i> , Reforestation Fund
FGD	Focus Group Discussion
HP	<i>Hutan Produksi</i> , Production Forest
HPK	<i>Hutan Produksi Konversi</i> , Production Forest Designated for Conversion to Other Productive Uses
HPH	<i>Hak Pengusahaan Hutan</i> , Large-scale Commercial Forest Concession
HPHH	<i>Hak Pemungutan Hasil Hutan</i> , Rights to Harvest Forest Products
HPHH-MA	<i>Hak Pemungutan Hasil Hutan Masyarakat Adat</i> , Rights for Customary Communities to Harvest Forest Products
IHPHA	<i>Ijin Hak Pengelolaan Hutan Adat</i> , Permit to Manage Customary Forests
IPK	<i>Ijin Pemanfaatan Kayu</i> , Timber Utilization Permit
IPK-MA	<i>Ijin Pemungutan Kayu oleh Masyarakat Adat</i> , Timber Logging Permit for Customary Communities
Kopermas	<i>Koperasi Peran Serta Masyarakat</i> , Community Cooperative
LMHA	<i>Lembaga Masyarakat Hukum Adat</i> , Customary Community Organization
MRP	<i>Majelis Rakyat Papua</i> , Papuan People's Assembly
NTFP	Non-timber forest product
RKT	<i>Rencana Karya Tahunan</i> , Annual Logging Plan
PBB	<i>Pajak Bumi dan Bangunan</i> , Building and Land Tax
PRA	Participatory Rural Appraisal
PSDH	<i>Provisi Sumber Daya Hutan</i> , Forest Resources Rent Provision
TPTI	<i>Tebang Pilih Tanam Indonesia</i> , Sustainable Selective Cutting and Planting Systems
UNIPA	<i>Universitas Negeri Papua</i> , State University of Papua

Preface

This case study is part of a series describing the impacts of decentralization in the forestry sector in Indonesia. Over the last two years (2002–2004), a team of researchers from regional universities, NGOs and CIFOR worked on a policy action research project: ‘Can Decentralization Work for Forests and the Poor?’, intended to help inform policy decision making. The research has involved working with multi-stakeholder networks in five provinces across Indonesia (South Sulawesi, East Kalimantan, Jambi, West Kalimantan and Papua) in gathering and sharing detailed socio-legal, economic and ecological analyses of the impacts of decentralization on forestry and the poor.

The foundations for decentralizing Indonesia’s highly centralized governance system were laid out in Law No. 22/1999 on Regional Governance and Law No. 25/1999 on Fiscal Balancing between the Central and Regional Governments. Decentralization has provided district governments with considerable opportunities to reform their governance, development and public service delivery. The most tangible manifestation of decentralization in the forestry sector was that district heads were given authority to grant small-scale forest concessions for the first time.

The first two years of decentralization in Indonesia represented a time of transition and adjustment. Forest-rich districts celebrated this new freedom to gain direct economic benefits by establishing district timber regimes. As a result there was a boom in small-scale logging. The national government reacted with a new

set of forestry policies attempting to limit forest degradation, mainly by curbing district authority. At about the same time, many district governments and local stakeholders started to realize that their level of timber exploitation was not sustainable. In these districts, a process of policy learning led to new, more carefully considered district forestry policies. However, their potential was limited as the central government had already taken back much of the district’s authority for forestry.

Under the New Order regime, the forest governance system had created an unsustainable timber extraction regime. It has also been described as a ‘poverty-creating’ model of forest management (DFID 1999)¹. So far, decentralization in Indonesia has not magically solved the problems built up over decades of over-exploitation and under-investment in natural resource-based development. Decentralization has undoubtedly brought short-term economic windfalls to some forest-dependent communities, and brought decision-making closer to local stakeholders. However, if forest and eco-system management at the local level is to be sustainable, all the stakeholders who will be impacted by government policies in this area need still greater involvement. Their input should help to ensure that final policies provide them with real opportunities to improve their livelihoods and the natural environment within a framework of sustainable natural resource management.

CIFOR gratefully acknowledges the financial support of ACIAR and DFID as well as the important role played by partners

in the five locations: Hasanuddin University (UNHAS), Tanjungpura University (UNTAN), State University of Papua (UNIPA), the Study Center for Regional Autonomy Law and Policy (PSHK-ODA), Yayasan Konservasi Borneo and Yayasan Pionir Bulungan. We would also

like to thank the district governments, village communities and other local stakeholders in the areas where the research was conducted. Special thanks go to the Indonesian Ministry of Forestry's Agency for Forestry Research and Development, FORDA.

Bogor, Indonesia

Siân McGrath
Project Coordinator

Abstract

The report focuses on the impacts of Special Autonomy in Papua on the forestry sector. It studies the advantages and problems associated with the current forestry management system. The most significant change following special autonomy for Papua was the introduction of small-scale concession permits granted to community cooperatives, locally known as *Kopermas*. As a result, CIFOR and the State University of Papua's research focused on these *Kopermas*, analyzing data on timber production and revenues from concessions, and determining the flow of benefits to customary communities' incomes and to regional revenues. The objective was to determine how effectively the *Kopermas* system has empowered local communities.

Using a combination of conventional and participatory/action research methods, the research team evaluated the livelihoods and environmental value of forest resources for local people. We also facilitated stakeholder input into our research findings and analysis. The team also worked with local communities to determine their current capacity for forest management; which mechanisms were used to distribute the benefits from the new system; and how people were involved in decision-making about permit applications and concession management.

This research found some direct involvement of local people in forest

management and short-term benefits for local communities. However, we also found that the benefits from timber revenues have not been fairly shared among local people and other actors involved in the timber business. As a result, community forestry cooperatives have yet to contribute to equitable and sustainable development for local people. To improve this situation, local stakeholders identified an urgent need to empower customary organizations and individuals by equipping them to manage their own natural resources independently. This will reduce the likelihood that communities are exploited by more powerful stakeholders in the future. Alongside low capacity, facilities and skills for commercial forest management, challenges included low levels of information about government policy, unclear and inconsistent regulations and implementing guidelines, lack of recognition of communities' rights, and lack of capital for investment. Local people concluded that government institutions and local stakeholders should take a more proactive role to provide the necessary assistance and advice. The government needs to issue and socialize policies with practical and applicable sanctions for non-compliance and to facilitate local involvement in policy making regarding permit issuance and provincial and district spatial planning processes. Coordination and cooperation among the relevant institutions and organizations could also be improved.

Following the collapse of President Soeharto's centralized New Order regime, which had controlled Indonesia for over 30 years, the new government decentralized administrative authority for many aspects of the national governance system to provincial and district-level governments on Indonesia's far-flung outlying islands. The era of decentralization began for Papua when it was given Special Autonomy status under Law No. 21/2001. Together with Aceh, Papua was awarded autonomous powers – over and above those transferred to other provinces – in explicit recognition of its unusually high levels of poverty. This followed years of under-investment in socio-economic infrastructure and community development by the New Order regime, which at the same time reaped extremely high revenues from exploiting Papua's natural resources: copper, gold and timber.

Since that time, the forest management paradigm in Papua has seen a dramatic shift to community-based forest management. The new forestry decentralization policies have been welcomed locally. They are considered more appropriate than the previous extractive regime because they give more recognition to the aspirations and interests of customary communities (*masyarakat adat*), particularly as they acknowledge the communities' usufruct land rights (*hak ulayat*) in the context of natural resource-based development.

This case study examines the impacts of decentralized forest policies in Papua, and presents options for governance reform to improve the livelihoods of communities living in poverty on traditionally owned land that is rich in forest resources.

1.1. Papua's Forestry Resources: Development Potential and Contribution to Regional Revenue

The largest province in Indonesia, Papua is over three times the size of Java, with a total area of 42 198 100 ha. Approximately 85% of this vast province is forested¹. Indonesia is home to a population of over 220 million people, and in 2002 Papua's population stood at just 2.57 million, with an annual growth of 3.22%. There are 57 ethnic groups in Papua, who speak 252 different languages and represent distinct cultural traditions. Papuans have always had strong customary social, economic, cultural and political institutions, governed by indigenous laws and practices. If managed well, these customary governance systems could be used as a foundation for developing more effective governance and natural-resource management systems in partnership with local government in the region.

Until the middle of 1997, in the months leading up to the prolonged regional monetary crisis, 59 different companies held Commercial Forestry Concessions (*HPH*) in Papua. Their combined gross timber production target was almost 4 million m³. Between the 51 active concessions logging an area of 113 837.46 ha, actual production was 2 143 729 m³. Other concessions were also operated under Timber Utilization Permits (*Ijin Pemanfaatan Kayu, IPK*) and 'Other Legal Permits' (*Ijin Sah Lainnya, ISL*); these covered an area of 12 851 ha, with gross timber production of 404 173 m³ (Provincial Forestry Office of Papua 2002).

Although the growth figures fluctuated, gross timber production in Papua rose annually until the onset of the monetary crisis in 1997.

After the crisis, gross timber production declined. After the introduction of Law No. 21/2001 on Special Autonomy for Papua (the Special Autonomy Law), gross timber production fell sharply by 17.43% to just over 1 million m³ in 2001 and by 42% to two-thirds of a million m³ by 2002² (Pawitno 2003).

Between 1993 and 2002 recorded regional revenue from Papua totalled US\$ 0.19 billion. The forestry sector supplied an average of US\$ 1.34 million per year during this period, or US\$ 13.4 million in total. In other words, the forestry sector contributed 6.7% of the annual regional revenue generated from Papua. However, the forestry sector's contribution (as a percentage of regional revenue) tended to decline year by year. In the years before the crisis (1993–1997), the forestry sector contributed an average of 13.13% of the annual regional revenue. This figure declined during the monetary crisis (1997–2001), when the forestry sector supplied only 5.72%. In 2002, a year after the introduction of special autonomy, the recorded forestry sector contribution to regional revenue continued to decline, to a mere 2.88%.

Figures from the Provincial Forestry Office of Papua (2002) show that in the period between 1993 and the start of the monetary crisis HPH concessions were exploiting 107 499.765 ha/year, with gross timber production of 2 124 289.045 m³/year. Between 1997 and 2001, this fell to an average of 90 002.93 ha/year, with gross timber production of 1 515 136.626 m³/year. By 2002, recorded timber production was down to 535 769.65 m³. In the unstable national political conditions of the Reform era, following the collapse of Soeharto's New Order regime, several HPH concessions ceased production, or, where they continued to operate, they took only the highest-value timber species such as Merbau (*Intsia* spp.). Since 2001, only 21 of the 60 registered HPH concessions have been operating actively in Papua, and in 2002, this figure declined further to 15 active HPH concessions.

What caused forestry revenues to decline following the monetary crisis and the introduction of special autonomy? On the one hand, the size of the areas available for logging declined, causing timber production to fall, and, on the other, operational costs rose. Prior to decentralization, HPH concessions awarded

to close allies of the New Order regime had already cleared massive areas of forest in Papua. Recently, an increase in illegal logging activities has again caused devastating forest loss in the province. As forest resources on Kalimantan, Sulawesi and Sumatra run low, the pressure on Papua's relatively large forest reserves is set to continue to rise.

1.2. A New Forest-management Paradigm in Post-decentralization Papua

Local governments and communities had high hopes that decentralization and its various policy instruments could accelerate development and empower local communities in Papua (which has since been controversially divided into two provinces by the central administration: Irian Jaya Barat and Papua). Certainly, the new Law No. 25/1999 on Fiscal Balancing offered a far greater share of forestry sector revenues to the regional governments than ever before³. Law No. 22/1999 on Decentralization and the Special Autonomy Law for Papua also raised hopes that customary communities could now benefit directly from forestry. Decentralized forestry policies allowed local governments to grant forestry concessions to community cooperatives for the first time. Local people looked forward to sharing in the benefits from forestry, both from returns to regional revenue and from direct contributions to community livelihoods.

This paradigm shift gave communities with indigenous land rights greater opportunities to become involved in managing their forests. Law No. 41/1999 on Forestry (henceforth called the Forestry Law)⁴ formed the legal basis for acknowledging local communities' land rights. The Special Autonomy Law further supports the rights of indigenous Papuan communities to benefit from their local natural resources – by requiring all concession holders to give a set amount of compensation to local communities for using their land. The guidelines for implementing these legal provisions are laid out in more detail in two national Ministerial Decrees covering community rights to forest resources⁵. The Government of Papua Province used these decrees as the basis for giving customary communities an unusually clear legal foundation, protecting their rights to benefit from and participate in managing

their own forest resources. This even included customary forest lands that had already been assigned to large-scale HPH concessions by the central administration in Jakarta.

The provincial government responded positively to the recognition of customary communities' rights under decentralization. Its first action was to issue a Governor's Decree⁶ on The Rights of Customary Communities to Harvest Forest Products, better known as IPK-MA (*Ijin Pemungutan Kayu oleh Masyarakat Adat* (Timber Logging Permit for Customary Communities), and operational guidelines⁷. These rules explicitly state that to be eligible for a permit to manage customary forests (*hutan adat*), customary community groups must be formally acknowledged by the local government. They can be legally recognized if they form a Customary Community Organization (*Lembaga Masyarakat Hukum Adat*, LMHA) or they are formally affiliated with a legally constituted Community Cooperative.

Local communities chose to form Community Participation Cooperatives (*Koperasi Peran Serta Masyarakat*, or Kopermas⁸) to operate in the forestry sector. A Kopermas cooperative is a cooperative enterprise established to fulfil the livelihoods needs and development aspirations of local communities by exercising their land rights to benefit from their own natural resources (Office of Cooperatives and Small and Medium-sized Enterprises 2002). The objective is that local communities will take advantage of their rights by forming and managing independent economic organizations, closely aligned with their traditional governance systems.

By forming a Kopermas, customary communities were eligible to apply for IPK-MA permits from the provincial government. These permits give them the right to manage concessions for logging in Production Forest (*Hutan Produksi*) areas of between 250 ha and 1000 ha (inside and outside existing centrally-issued HPH concessions). These provincial permits are valid for one year only. In Manokwari District, cooperatives can also apply directly to the district government for an IHPHA permit (Permit to Manage Customary Forests) to manage up to 2000 ha of production forest. These district-issued permits are valid for 20 years.

Lacking the capital and know-how for concession management, local communities have had no choice but to make deals with partners, i.e., state-owned timber companies, HPH concession holders and private investors, in order to exercise their new rights. The deals vary greatly. Some grossly exploit local communities. Other community groups have been able to secure better deals for themselves. Our preliminary analysis shows that the partnership mechanism that has built up between communities and more experienced partners has a long way to go before it increases the welfare of customary communities in a lasting and sustainable way.

Local people who are not members of clans or communities holding customary land rights currently have no official access to forest resources. In the future, district and provincial policies will need to give far more consideration to how these landless people can share in forestry-based development opportunities.

The management of concessions by partners has not been ecologically sensitive, often falling very far from the principles of sustainable forest management. This, together with the sometimes appalling profit-sharing deals agreed with local communities, has led to a negative image for Kopermas cooperatives.

Why have the new policies not delivered for all communities? Protecting local communities from exploitation will take capacity building and investment in strengthening community representative groups, such as the Customary Community Organizations (LMHA) and Kopermas cooperatives, and developing mechanisms to ensure that landless people are not excluded from benefits. In short, more time is needed to build the technical and organizational skills of local communities. Policies should also take into account the weak financial negotiating position of local communities by providing clear information on profit-sharing mechanisms. Other issues that have surfaced include overlapping land uses and related conflicts between customary communities and HPH concessionaires or other permit holders. This problem is made worse by the fact that a Forest Spatial Plan incorporating customary community boundaries and land uses has yet to be drafted.

2.1. Introduction to the Study

In 2003, the Center for International Forestry Research (CIFOR) and the State University of Papua (UNIPA) began collaboration on research into the impacts of decentralization on local forests and livelihoods in Manokwari District. The questions that the research team sought to answer were: How have local communities been affected by the first legal opportunity to manage their forest resources themselves? How have local communities benefited from the decentralized forestry system? and, How can benefits be distributed equally between local stakeholders? To answer these questions, UNIPA and CIFOR conducted participatory policy research with local stakeholders in Manokwari District, Irian Jaya Barat Province. The team conducted biophysical surveys and socio-economic research with three villages holding Kopermas (Community Cooperative) permits.

We hope that the findings from this study will support the development of a future forest management system that gives greater consideration to involving Papua's customary communities in policy development based on their rights and needs.

2.2. Research Locations

Research was conducted in three Kopermas cooperatives in different subdistricts of Manokwari District. Each of these cooperatives was active for the duration of the study and was considered to be fairly representative of the operational models of Kopermas cooperatives involved in forest concession management in Papua. The three Kopermas groups had a range of agreements with external partners, ranging from fairly reasonable to extremely exploitative. The groups were:

1. Meyuosusra Kopermas cooperative in Inoduas Village, Manokwari Subdistrict,
2. Putra Bondi Indah Kopermas cooperative in Tobouw Village, Ransiki Subdistrict; and
3. Warbiadi Kopermas cooperative in Watariri Village, Oransbari Subdistrict.

2.3. Research Objectives

UNIPA and CIFOR focussed on how benefits were distributed to local communities in Manokwari District via the Kopermas cooperative system for managing small-scale logging permits. Our research had the following objectives, and involved a wide range of stakeholders:

- To study the advantages of and problems with the current local forestry management system in Papua and suggest options for a new forestry management system applicable to Papua.
- To analyze data on timber production and revenues from small-scale concession permits (IPK-MA), and determine the flow of benefits both to customary communities' incomes and to regional revenues.
- To further analyze the distribution of benefits from the IPK-MA system within customary communities and the Kopermas cooperatives.
- To determine the potential for conflict over overlapping land ownership claims in Manokwari District following the introduction of decentralization in the forestry sector.

2.4. Research Methods

The study began with a detailed analysis of the decentralized forestry policies that regulated community concessions. Our analysis focussed

on determining local people's perceptions of how these policies changed or adapted the existing local forest management models in Manokwari District. To determine the forestry sector's contribution to regional revenue, we also collected relevant data from local government offices (e.g., Manokwari District and Provincial Forestry Offices, the District Revenue Office, etc.) and analysed the sources, value and allocation of revenue from forestry management in Manokwari District.

The team used a combination of conventional and participatory/action research methods to determine the livelihoods and environmental value of forest resources for local people involved in this research project. Surveys of the biophysical potential of forest areas, including vegetation and soil sample analyses, were carried out and tree volumes were measured in the Kopermas concession areas.

Participatory Rural Appraisal (PRA) techniques were used to facilitate community-level input into our research findings and analysis. The team worked with each local community to determine its current capacity for forest management and identify what mechanisms were used for distributing benefits from forest management in each area. We tried to identify how far local communities were involved in the technical day-to-day operation of the forestry concession, and how far they were involved in wider decision-making processes surrounding permit applications and managing concessions. This involved intensive site visits and discussions with local people in the village, in-depth interviews based on semi-structured questionnaires, and participant observation by the research team and students from UNIPA, who stayed in the three villages.

These findings were used to identify and explore the key issues raised by local

community members. This was done during a series of Focus Group Discussions (FGDs) at the community and district levels. The team also worked extensively with local government officials to determine the level of political will to improve the status and role of customary communities in policy decision-making in the future. Qualitative interviews with key informants involved in forest management were used to triangulate data and generate relevant technical insights into policies and local forest management issues.

Finally, the team held two workshops involving stakeholders at all levels (village to provincial) in Manokwari. These meetings were useful as they helped us to validate and confirm our findings and involve local people and local government in analyzing the findings and formulating policy recommendations. The outcome of this research process was that, at the two workshops, local stakeholders negotiated and formulated several recommendations on their future research needs and the way forward for forestry development in Papua.

Stakeholders directly involved in this research included the following:

- (1) Holders of customary ownership rights for the forests in the Kopermas cooperatives' concession areas
- (2) Members of customary communities around the cooperatives' concession areas, with and without official land rights
- (3) Village government officials
- (4) Managers of Kopermas cooperatives
- (5) Businesses who had formed partnerships with Kopermas cooperatives
- (6) Relevant government officials (staff from Manokwari District and Papua Provincial Forestry Offices, Cooperatives Office, Industry and Trade Office, etc.)

3.1. New Policies and Regulations Enabling Community Forest Management

Within the framework of decentralization, the Minister of Forestry issued two national decrees to promote the rights of local communities to benefit from forest management and products⁹. These decrees also transferred some authority to district governments for both customary community forests and state forest management. The new authorities are largely limited to issuing small-scale community-based concessions for logging. Under these policies, formally recognized community groups and/or private companies can obtain small-scale forest utilization permits through HPHH permits (Rights to Harvest Forest Products) or HPHH-MA permits (Rights of Customary Communities to Harvest Forest Products). The first decree, regulating HPHH permits – which are no longer valid¹⁰ – gave local communities an opportunity to benefit from forest management by harvesting timber from concessions with an area of 100 ha for one year. Most district governments throughout Indonesia used this decree as the basis for their own policies on forest harvesting by communities in their areas.

The second decree, regarding HPHH-MA, regulates ‘non-commercial’ activities. The decree is still in force and enables communities to utilize forest products for non-commercial uses both inside and outside state forests for an ‘unlimited’ period¹¹. Since the introduction of decentralization, only Papua has implemented

this decree. This is the root of the notable difference between the decentralized forest policies of Papua and those of other provinces.

Central government policies on customary communities’ rights to harvest forest products are contradictory. Whilst the Ministerial Decree refers only to non-commercial harvesting activities, its implementing decree (Director General’s Decree) refers to commercial harvesting of forest products. This decree states that customary communities are permitted to harvest forest products commercially for an unlimited period on an unlimited area of forest land.

As a further example of legal uncertainty, the Ministerial Decree states that the District Head has the authority to issue permits for forest utilization by the community; but the implementation decree allocates this responsibility to the Head of the District Forestry Office, who must obtain approval from the Provincial Governor.

These contradictions have led to differences in the areas and time-periods allowed under forest-product harvesting permits between provincial and district-issued permits in Papua. This is because the provincial and district governments have tended to choose which policy they will follow based on which one offers them most profit. Accordingly, in Papua, the provincial government has drafted legislation giving the authority to the Governor to issue permits relating to community-based harvest of forest products, and recent district legislation gives this authority to the Head of the District Forestry Office.

3.2. Accessing Forest Resources: Timber Logging Permits for Customary Communities (IPK-MA) and Permits for the Management of Customary Community Forests (IHPHA) in Papua

Since decentralization there have been three ways for customary communities to gain access to forest resources in Manokwari District. First, they can negotiate with companies holding HPH concessions (Large-scale Commercial Forest Concessions) (issued by the central government) for financial compensation. Second, they can apply to the district government for an IHPHA. Thirdly, they can apply to the provincial government for an IPK-MA.

In line with national legislation, the provincial government can issue IPK-MA permits to individuals, private companies in partnership with customary communities, Customary Community Organizations (LMHA) or community cooperatives (Kopermas). However, in practice, the Provincial Government of Papua has issued permits only to communities that have formally established 'economic community organizations' or Kopermas. Our analysis of forestry-sector policy in relation to community access to decision-making processes and obtaining benefits from forest products in the era of decentralized governance revealed the following important issues:

1. At the same time as decentralization and special autonomy were introduced for Papua, central government issued new HPH concessions in the province, adding to the existing large-scale HPH concessions, which are still in operation. With its newly held authority, the provincial government has responded by issuing a policy¹² that requires HPH concession holders to pay communities with customary land rights compensation for timber taken from their forests.
2. Since 2002, local communities have had greater access to forest-resource utilization, as they can apply for IPK-MA permits from the provincial government¹³.

These concession permits cover areas of 250–1000 ha for a period of one year.

3. In April 2004, the District Government of Manokwari issued an IHPHA permit that gave the Kopermas cooperatives the opportunity to manage forests of 2000 ha for a period of 20 years¹⁴.

Because new district IHPHA permits are not yet effective in Manokwari, our research focussed on the process and impact of IPK-MA permits issued at the provincial level to partnerships involving Kopermas cooperatives. Once a Kopermas cooperative has been legally established, IPK-MA permits will be issued by the Head of the Provincial Forestry Office once the group has followed the process illustrated in Figure 1.

Most new applicants apply to the Head of the Provincial Forestry Office for IPK-MA permits with an area of 1000 ha. Extensions for IPK-MA permits can then be given by the District Head, for an area of 250 ha. Under the cooperation agreements for the three Kopermas cooperatives, investors or business partners are responsible for paying Forest Resource Rent Provision (PSDH) and Reforestation Funds (DR) after the timber is shipped.

Theoretically, Kopermas cooperatives must be established on the initiative of the customary land-rights holders. Likewise, the Kopermas group should be responsible for the process of applying for an IPK-MA permit, and permit implementation should actively involve community members with customary land rights.

However, the situation is very different on the ground. For example, clan members were not really involved in the establishment of the Warbiadi Kopermas cooperative. Only individual clan heads holding land rights were involved in establishing the cooperative, arranging the IPK-MA permit and negotiating the contract with the business partner. However, in the Meyoususra and Putra Bondi Indah Kopermas groups all members of the clans with usufruct land rights knew about, and were involved in, the process, from establishing the Kopermas cooperative through to negotiating the contract agreement with investors. However, it was still apparent from these two

Figure 1. IPK-MA permit requirements and application process

cases that the driving force behind establishing their Kopermas cooperatives and applying for IPK-MA permits was the external investors, who sought partnerships simply to give them access to relatively cheap timber supplies on these communities' lands.

The Manokwari District Government recently issued a policy regulating a new type of permit for local communities. This IHPHA

permit has yet to be implemented, but discussion with local stakeholders on its content indicated that IHPHA permits could potentially offer better opportunities for local people and for sustainable forestry development in the longer term. In contrast to its national and provincial counterparts, this policy clearly outlines the role and long-term obligations for investors seeking partnership with local communities in order to

obtain a permit: the new policy obliges them to invest in local human resources (for example, by providing training and developing skills for concession management by the community); they must demonstrate how they will contribute to the development of local infrastructure.

The new policy also outlines standards and mechanisms for regulating partnerships between Kopermas cooperatives and external partners (investors). For example, the policy emphasizes the fact that Kopermas partners must be resident in Manokwari and have operated their business there continuously for at least three years. This requirement may strengthen community participation in the decision-making process because these permits require the approval of the Subdistrict Head (*Camat*) or Village Head, and applicants must be able to demonstrate that the process is known about and supported by the local community. The District Government of Manokwari also requires large-scale HPH concession holders to set aside a maximum of 10 000 ha of their concession areas for customary communities operating IHPHA permits¹⁵. This element of the policy has been designed to ensure that the community cooperatives obtain viable concessions, that they are allocated suitable land, and that local communities benefit from the new system.

A comparative analysis of the various different policies regulating customary community involvement in forestry at the national, provincial and district levels also

indicates that the District Government of Manokwari has shown a stronger commitment than other districts to improving the livelihood of local communities, supporting conservation and sustainable forest management, and protecting local natural resources from irresponsible investors or partners. Thus, this district policy gives a far more prominent position to the interests of local communities and forest sustainability compared to policies in force both before the Reform era and since the provincial government's post-Reform policies.

All in all, however, there are still several post-Reform policy issues that need attention. One important question is how well these policies have accommodated the views and needs of local communities, and how the provincial and district governments plan to evaluate their policies' performance on this front. Likewise, how do the provincial and district governments plan to 'socialize' their policies to raise awareness amongst local communities of their new rights and involve them in evaluating and adapting these policies in the future? In addition to ensuring democratic involvement, the district and provincial governments also need to give more consideration to who is responsible for implementing the new regulations and how they will promote compliance. For example, what kind of incentives will be given to permit holders who comply and what sanctions will be imposed on those who break the rules?

4.1. State Delineation of Forest Lands and Local Forest Ownership Systems

For some customary communities in Papua, the system for allocating land rights was originally determined by establishing who was the first to clear and use as yet unclaimed land. Under one model of customary ownership, as soon as any previously unclaimed land was worked by a clan group the land fell to the clan as collectively owned land (*hak ulayat*). These land rights were passed on through the generations to male heirs within the clan. In other communities, a clan's land rights were established over the area of forest in which it hunted (as long as it was not claimed by other clans). Rights established on hunting grounds give the local community collective rights of usufruct, or the sustainable use of resources on the land. Both usufruct and inheritance rights are untradeable. They can, however, be 'borrowed and used' by the members of clan group.

Based on these land-rights systems, there is a common but informal acknowledgement in Papua that all forest areas are owned by customary communities or clans. The rules for land use by clan members are set out in customary laws and norms for each clan. Use by external parties, be they the government, Large-scale Commercial Forest Concession (HPH) holders or other private investors, must be approved by Head of the clan and the land-rights holders within his clan. Permits granted by external parties (e.g., the state) are limited to the use of forest resources, whilst the forest land remains the property of the land-rights holders. The only exception is for land used for building developments (office buildings, public facilities etc.). In these cases, the land owners

relinquish their rights at an official ceremony during which agreed compensation is paid in return for the community's land rights.

This system for allocating land rights has prevailed for many years, and it has spread and strengthened in post-Reform Papua. Many stakeholders put this down to the fact that customary communities' traditional rights and governance systems were not acknowledged under the New Order's centralized forest management system.

The three Kopermas cooperatives involved in this study are subject to the traditional land rights of the Arfak ethnic group. The Meyuosusra Kopermas cooperative is held by the Mandacan clan, the Warbiadi Kopermas is held by the Anari clan, and the Putra Bondi Kopermas is held by the Romander, Ainusi, Mandacan and Aiba clans. In all of these clans, the land and forests are communally owned, and each family has an automatic right to manage and use the land.

The land belonging to these three communities is officially classified by the Ministry of Forestry as forest production land designated for conversion to other uses and not held by HPH concessionaires. As a result, there is little likelihood of land conflict between the customary community land owners and HPH concession holders. Table 1 illustrates the land's official state classification, the traditional ownership system and the areas covered by the three Kopermas cooperative concessions studied here.

Traditional communities' systems of land ownership and use in Papua have seen several changes in the last decade. This is due mainly to the arrival of new stakeholders. The trend evident in most communities is the shift from communal to individual/family ownership

systems. When it comes to harvesting products from customary community forests under the Kopermas scheme, traditional land-rights holders play a more significant role in decision-making and management than do the other clan members (the wider community).

Based on its traditional ownership status, the Warbiadi Kopermas cooperative belongs to a single family headed by Mr Lambertu Anari. By contrast, the Meyuosusra Kopermas belongs to the Mandacan clan and includes

several households in the local community¹⁶. The Putra Bondi Indah Kopermas covers land held by five families from different clans¹⁷. These families play a key role in the decision-making process regarding the use of their forest land. However, this does not necessarily mean that they ultimately derive greater benefits than do other clan members. Distribution of benefits within the wider community is dependent on the mechanisms for sharing profits and benefits adopted by each clan or cooperative.

Table 1. The ownership system for traditional lands covered by the Kopermas cooperatives' concession areas

Kopermas cooperative	Customary Community Lands			
	Area (ha)	Forest status	Ownership system	Land-rights holders or Head of clan as their representative
Meyuosusra	3000	HPK*, Outside the HPH concessions	Communal (One clan)	The Mandacan clan, represented by Yulianus, Yulius, Tomas, Moses, Philip, Yosi, Marince and Susana Mandacan
Putra Bondi Indah	8315	HPK*, Outside the HPH concessions	Communal (Several clans)	The Aiba clan (Boas Aiba and Yance Aiba), the Ainusi clan (Yoas Ainusi), the Mandacan clan (Zeth Mandacan) and the Bocoumiei clan (Sanebei Romander)
Warbiadi	2500	HPK*, Outside the HPH concessions	Individual (One clan)	The Head of the Anari clan (Lambertus Anari)

(*) HPK = Production Forests Designated for Conversion to Other Productive Uses.

Overall, the local people involved in this study felt that the Kopermas (Community Cooperative) system had had a very positive impact on the distribution of benefits from forestry by giving them legitimate access to timber resources for the first time. However, the system was seen to have had little success in preserving water sources, non-timber forest products (NTFPs) or timber stocks in the local forests.

This section outlines the nature of the partnerships between communities and external investors and provides a more detailed outline of these impacts on community incomes, benefit sharing opportunities, and accessibility and transport infrastructure.

5.1. Partnerships: Local Communities, Kopermas and Investors

Forest concession management is a complex business; it requires large investment and appropriate technological knowledge as well as access to networks and markets. Forest policies and regulations are numerous and diverse; it takes a relatively high level of education and knowledge to understand them. Lacking policy information, and financial, technical and political support, communities have formed Kopermas cooperatives to enter into partnerships with investors who have the know-how and resources to run concessions in their customary community forests.

The Kopermas concession model encourages partnerships between local communities and HPH (Large-scale Commercial Forest Concession) and non-HPH companies in recognition of limited community capacity for managing concessions. The objective of establishing the Kopermas model

was to promote skills development through active participation in forest management, and give the communities access to benefits from concessions. Investors' roles should not be limited to investing the capital needed to fell trees; instead, communities and investors should be equal partners in the collective management of customary community forests. Benefit distribution should also be fair and equal, based on the communities' provision of land and trees and the partners' capital and skills input. The role of the investors should also be to help develop local communities' capacity for forest resource management. Operating the concession should also provide employment opportunities and valuable experience for local community members.

However, in reality, investors have tended to take advantage of the communities' limited capacities and weak negotiating skills. Investors see their Kopermas partnership more as an administrative necessity for logging timber in customary forests. The Kopermas model needs to be adapted if it is to meet its goal of empowering local communities and giving them a fairer share of the profits from forest resource management in Papua. See Table 2 for details of the partnerships discussed in the study.

5.2. Forests and Community Livelihoods

Traditionally, forests have played a vital role in the lives of customary communities: nearly every aspect of the communities' material and spiritual lives is dependent on forests. Spiritually, the forest is cast as a 'mother' who provides local communities with all their needs, and who binds social relationships between ethnic groups and between clans within ethnic

Table 2. IPK-MA permits and the Kopermas cooperatives' partners in Manokwari District

Kopermas cooperative	IPK-MA Permit Decree	Area (ha)	Partner/address
Meyuosusra	KEP-522.1/11/1136 16-06-2003 to 30-06-2004 (Provincial Forestry Office of Papua)	1000	PT. Tataolah Hutan Prima Abadi, Sorong
Putra Bondi Indah	KEP-522.1/11 13-01-2004 to 31-01-2005 (Provincial Forestry Office of Irian Jaya Barat)	1000	PT. Daya Utama Agung Lestari, Malaysia
Warbiadi	SK No. 522.a/I-PH/ 976/IX/2001 22-09-2001 to 31-09-2002* (Head of Manokwari District)	250	CV. Sinar Terang, Manokwari

* On 8 July 2002 the Head of the Manokwari District Forestry Office made a recommendation in support of IHPHH-MA permit extension, based on Kopermas Warbiadi's proposal. By July 2004, the Kopermas had already ceased its forest utilization operations.

groups. In the past, traditional governance systems were used to manage forests on a daily basis. However, in the era of centralistic governance, these norms were superseded by statutory national laws, which reserved the opportunity to exploit forests for HPH concession holders, which in turn diminished the subsistence function of forests for local communities (e.g., for hunting, gathering NTFPs etc.) and increased poverty levels.

In general, members of customary communities in Papua rely on small-scale farming using traditional methods to harvest forest products (timber and non-timber products), and swidden agriculture to fulfil basic subsistence needs. Various forest products, such as cassava and papaya leaves, the leaves and young fruit of the *melinjo* (*Gnetum gnemon*), bananas and soybeans, provide food. The forests also provide good hunting, mostly of wild pigs and deer for subsistence and trade. Forests are also a critical source of firewood, traditional medicines and timber for rudimentary fishing-boat and house building. As yet, in Manokwari the potential for NTFPs, such as rattan, has not been exploited commercially by local communities.

In the villages of Warbiadi and Putra Bondi Indah, the area allocated as a logging concession is also part of an important catchment area which forms a watershed, maintaining the local water supply, fishing opportunities and river transportation.

5.2.1. Benefit sharing: cash payments to Kopermas cooperatives

Under the New Order regime, local communities had no direct or official rights to forest resources. Forest areas were officially classified as state-owned lands, which were allocated to HPH concession holders for timber exploitation. In theory, local communities were supposed to receive a small amount of monetary assistance from the HPH companies operating on their land via the Forest Village Development (*Bina Desa Hutan*) and Community Development for Forest Villages (PMDH) programmes.

These programmes were of no great benefit, as concessionaires rarely met their obligations. Local people received few or none of the benefits that HPH concession holders were supposed to provide; they said they did not like the 'in-kind' compensation system that was supposed to operate under these programmes. The promised infrastructure developments, such as health centres and school buildings, were rarely delivered. It is perhaps not surprising that the communities prefer the cash payments that they now receive under the Kopermas cooperative system.

The amount of compensation payable by HPH concession holders to customary communities is regulated in Gubernatorial Decrees No.13/2000 and No. 50/2001, whereby HPH concession holders are required to give

production compensation per cubic metre, as shown in Table 3.

The benefits received by Kopermas cooperatives vary according to the agreement made with the investors, and, in some cases, the volume of timber harvested. The amount of compensation varies from US\$ 3.33/m³ to US\$ 11.11/m³ and in certain cases even reaches an average of US\$ 22.22/m³. Where Kopermas cooperatives are in partnership with HPH concession holders, the maximum amount of compensation that HPH partners are required to pay is US\$ 5.6/m³ (for commercial timber). It is therefore not surprising that customary communities prefer partnerships with non-HPH investors/companies, who can pay more compensation. Table 4 below illustrates the volume of timber harvested in each of the Kopermas concessions studied.

The benefits received by Kopermas cooperatives vary according to the agreement made with investors. Table 5 below shows the deals that investors made with each Kopermas group. In the cases of the Meyuosusra and Putra Bondi Indah Kopermas cooperatives, in addition to the initial contract payment received by the Kopermas members cash compensation was also received for every cubic metre of timber produced.

In contrast, the Warbiadi Kopermas received no cash compensation from the volume of timber produced. Instead, the investor agreed to build 23 houses and establish a 60-ha cocoa plantation on land previously logged by the customary community.

As a result, although the volume of timber harvested in the Warbiadi Kopermas area was the largest, they received the smallest payment

Table 3. Levels of compensation (in Rupiah) for customary communities for timber harvested from areas for which they hold usufruct land rights in the Province of Irian Jaya (Papua)

Type of wood	Gubernatorial Decree No. 50/2001	Gubernatorial Decree No. 13/2000	
	2001 Annual Logging Plan (RKT)	2000 Annual Logging Plan	1995/96–99/00 Annual Logging Plans
Merbau (<i>Intsia</i> spp.)	25 000	3 000	1 500
Non-Merbau	10 000	2 000	1 000
Fancy plywood	50 000	---	---
Mangrove	1 000	600	300

Table 4. Kopermas gross timber production targets and actual production

Kopermas cooperative	Area of Annual Logging Plan (RKT) (ha)	Production/Year (m ³)		Type of wood*
		Target production	Actual production	
Meyuosusra	1000	22 477.22	4 011.53 306.38	Meranti (<i>Shorea</i> spp.) Mixed woods
Putra Bondi Indah	1000	19 973.07	8 859.22	Meranti (<i>Shorea</i> spp.)
Warbiadi	250	6 266.40	11 203.56 914.03	Meranti (<i>Shorea</i> spp.) Mixed woods

* For Reforestation Funds (DR) and Forest Resource Rent Provision (PSDH) payments, Merbau wood (*Intsia* spp.) is included in the Meranti category, while other species are classified as mixed forest woods.

of all the Kopermas groups. Arguing that the timber yield was lower than targeted, when the investor wound up operations in July 2004 neither the plantation nor the houses had been delivered, nor had any investment been made in reforestation activities. The community was left with a logged-out area, which extended beyond the 250 ha covered by the initial agreement, and rough frames for four houses. The targeted yield for this area had been 6 266.40m³ of Meranti and mixed woods; the actual yield was 12 117m³. Using the rates of payment set by Gubernurial Decree No. 50/2001, the investor should have paid the community an initial fee *plus* Rp. 289 215 300.00, or US\$ 32 135 for the volume of timber harvested. Instead, the community received compensation of US\$ 5 555.60 from the investor for failing to develop the cocoa plantation.

Neither Manokwari District Government nor the provincial forestry office had any record of an application for a Kopermas permit to log this area. Clan members knew nothing at all about official forest policies and processes for applying for a permit. Instead, the clan Head had signed a letter of agreement directly with a timber investor from Jakarta, 'Pak Edi', who had taken the agreement away with him and not left a copy. The Head of this extremely poor community said that his clan members were very unhappy with the outcome, and he was 'broken' by the agreement.

In general, our research found that investors managed the process of applying for and operating IPK-MA (Timber Logging

Permit for Customary Community) concessions (administration, finance, logging and timber sales). In each of these areas, there was little meaningful involvement of their customary community partners. However, the Kopermas cooperatives' share of the benefits was directly proportional to their level of involvement. For example, cooperatives received a far larger financial share when they were involved from the outset, from forming the Kopermas and applying for the IPK-MA permit to working on the concessions with the investors and double-checking actual production yields.

5.2.2. Indirect benefits: employment on concessions

Broadly-speaking, customary communities do not have the technical knowledge or skills required to operate a concession. However, we found that there was a limited amount knowledge transfer between partners and local Kopermas cooperatives. Customary land-rights holders in the three concession areas involved in this study were appointed as Kopermas chairmen by clan members who shared the land rights. As a result, knowledge transfer was limited to the local elite, either customary leaders or land-rights holders, or educated people from outside the village appointed as Kopermas staff, who received salaries of 5% of the production value.

Given the short time-frame within which a concession must be logged, investors use mechanical or semi-mechanical forest harvesting systems. The trees are felled and

Table 5. Benefits received by the community from Kopermas cooperatives (Rp.)

Kopermas	Area (ha)	Type of Payment (Rp.)			
		'Initial Fees' (to usufruct land-rights holders)	Production compensation (Rp./m ³)	Payment for land for logging roads/ km	Payment for land for log ponds
Meyuosusra	1 000	10 000 000	30 000 (for usufruct rights holders)	1 000 000 (for landowners)	5 000 000
Bondi Indah	1 000	30 000 000	100 000		
Warbiadi	250	60 000 000			

processed using chainsaws, timber is transported to the banks of log ponds by tractors or skidders and then loaded onto barges by crane. This, of course, requires skilled labour able to operate chainsaws, skidders and cranes.

In the past, the HPH concession holders did not employ local community members on their concessions. They brought in skilled labour from Java, Sulawesi and other islands, so local people never had the opportunity to learn how to use modern machinery for felling and processing timber. None of the three Kopermas concessions allocated a budget for training local people. The Kopermas concession holders used profit-share or cash payment systems (approximately US\$ 44.4/m³; US\$ 1 = Rp. 9,000) to pay skilled labourers – mostly ex-HPH labourers or newly arrived migrants from other islands. The women hired to cook and clean at logging camps were also mostly brought in from outside Papua.

This has increased social resentment of outsiders who were hired for better-paid and more skilled jobs on the Kopermas concessions. Local people were hired as unskilled labour, employed on a casual basis to load logs onto boats at the log pond (attaching the crane cables), and acted as guides for the logging teams. The numbers of jobs created for local people on the three Kopermas cooperatives is shown in Table 6.

5.2.3. Distribution and use of cash payments within communities

The Kopermas cooperative system has given local communities their first access to the mainstream cash economy. With their previous experience of handling cash limited to Rp. 10 000 notes (worth around a dollar), the local

people's new-found spending power has not been oriented to long-term investment. Where money was allocated to individual families, most people used their windfall payments to buy basic modern consumer items or to pay traditional debts and large dowries for women getting married. Cooperative managers also allocated some of this money to buy equipment needed by Kopermas staff and members and to subsidize the cost of daily necessities for members. Money left over was distributed amongst all the families in the cooperative. Over and above this, each family received a windfall share based on the volume of timber harvested. This was generally used to buy electronic goods such as televisions, CD players and air-rifles for hunting. Some members of Putra Bondi Indah Kopermas also planned to use profits made in 2004 to increase its fleet of motor vehicles in order to ensure that the community could more easily transport and sell its crops and products in the town (see Section 5.2.4, on transportation and accessibility).

In the Meyuosusra Kopermas cooperative, eight families received a small share of the payment based on the volume of timber harvested. However, the majority of this payment went to several members of the local elite, i.e., the Village Head and community leaders. This customary community was not involved in the permit application and decision-making processes, and as a result no funding was allocated to support the Kopermas staff and operations costs or for post-logging land rehabilitation.

Table 7, indicates the percentage of benefits allocated to different stakeholders involved in the Meyuosusra and Putra Bondi Indah Kopermas Cooperatives.

Table 6. Employment in Kopermas activities

Type of Work	Meyuosusra	Putra Bondi	Warbiadi
Kopermas staff (local elite)	2	5	4
Timber production (unskilled, casual labour)	1	1	6
Total	3	6	10

Table 7. Percentage distribution of cash compensation received per cubic metre of Merbau (*Intsia spp.*) wood in the Meyoususra and Putra Bondi Indah Kopermas cooperatives

Beneficiary	Use	Meyoususra		P. Bondi Indah	
		US\$	%	US\$	%
Customary land-rights holder	-	2.80	83	8.90	80
Head of clan	-	0.17	5		-
Village treasury	-	0.06	2		-
Kopermas Cooperative	Kopermas treasury	0.33	10	2.22	20
	Staff salaries		-	0.56	5
	Reforestation costs for logged land		-	1.11	10
	Cooperative's capital to buy essential items for its members		-	0.56	5
Total		3.33	100	11.11	100

Note: US\$ 1 = Rp. 9000.

5.2.4. Investment in transport infrastructure

The three villages that entered into Kopermas agreements with investors are relatively accessible by comparison with some of the more remote upland villages; they can be reached by car or even motorcycle from the nearest towns within 3–4 hours, on asphalt roads, although the routes involve fording rivers, which is not always possible during the rainy season. None of the concession areas is far from the coast (1–3 km). Each cooperative has been able to construct a log pond on the beach to enable easy timber transportation using sea barges, which ship timber directly from the shore to ports such as Surabaya on Java, Tawau/Labuan in Malaysia, or China. However, the remote locations of these log ponds makes it hard for government officials to monitor production yields, or ensure that timber has been legally harvested and concessionaires have paid the relevant taxes. Table 8 gives an idea of the accessibility of the three cooperatives.

The existence of the Kopermas cooperatives has increased accessibility for village communities by developing transportation in-

frastructure. This has helped local community members to bring their crops and products to market, connecting villages and accelerating village development through greater access to information. In several Kopermas cooperatives, a share of the production profits is also allocated to buy vehicles (cars or motorbikes) for the use of the clan members.

5.3. Environmental Impacts

5.3.1. Climate, soil and topography

The forests managed by the three cooperatives are tropical rainforests with an average rainfall of 32.68–228.56 mm a year. With a Q value of 14.3%, the area is categorized as a Type B climate in the Schmidt and Ferguson climate classification system. As is true in general in the northern part of Papua, the topography of the concession areas of the three cooperatives fluctuates, with a gradient ranging from 10% to 40%. The soil in these areas is alluvial with a sandy-loamy texture.

These conditions make Papua's forest land particularly fertile and are favourable for high-value tropical timber species.

Table 8. Accessibility of the Kopermas cooperatives' concession areas

Kopermas cooperative	Location (village/subdistrict)	Distance to (subdistrict/district) capital (km)		Distance to log pond (km)
		Sub-district	District	
Meyuosusra	Inoduas/Manokwari	30	30	2
Putra Bondi Indah	Tobou/Ransiki	10	150	1
Warbiadi	Watariri/Oransbari	5	120	2

Note: In Papua, the term Kampung means village (Desa), and the term Distrik is the same as subdistrict (Kecamatan) in other provinces in Indonesia.

5.3.2. Timber resources

High-value commercial timber species such as *Intsia* spp., *Palaquium* spp. and *Pometia* spp. dominate the concession areas of the Warbiadi and Putri Bondi Indah Kopermas cooperatives. Likewise, high-value species such as *Pometia* spp. and *Octomeles sumatrana* dominate the Meyuosusra Kopermas concession area. Rattan grows naturally on the Putra Bondi Indah concession but is yet to be harvested by the local community. Dominant tree species and their density are presented by concession area in Table 9 below.

5.4. Unsustainable Logging Models and Timescales

Following the timescale stipulated in national policy, the province has allocated concession permits for up to 1000 ha that are valid for one year only. However, at least three years would be needed to manage concessions of this size using sustainable selective cutting and planting systems (TPTI), following the RKT stipulated in national and provincial policy. Concessionaires would need even longer if they were to allow natural or assisted regeneration to maintain high-value mixed species on these concessions.

Table 9. Dominant species and tree-species density in the Kopermas cooperatives' working areas

Kopermas cooperative	Dominant tree species*		Density (tree/ha)	Non-timber
	Commercial	Non-commercial		
Meyuosusra	<i>Intsia</i> spp., <i>Pometia</i> spp., <i>Octomeles sumatrana</i>	<i>Ficus</i> spp.	8	-
Putra Bondi Indah	<i>Intsia</i> spp., <i>Palaquium</i> spp., <i>Pometia</i> spp.	<i>Ficus</i> spp., <i>Arthocarpus</i> spp.	20	Rattan (<i>Calamus</i> spp.)
Warbiadi	<i>Intsia</i> spp., <i>Palaquium</i> spp., <i>Pometia</i> spp.	<i>Ficus</i> spp., <i>Arthocarpus</i> spp.	16	-

*Trees with a diameter greater than 50 cm.

The IPK-MA policy requires small-scale concessionaires to plant two seedlings for every tree logged; however, investors have not complied with this requirement. Given their operational costs and the short timespan allocated for logging, investors tend to select the highest value commercial timbers, with a diameter of more than 50 cm. They also use heavy machinery intensively on the relatively small Kopermas concession areas, which has caused excessive erosion and unnecessary damage to the remaining vegetation and trees. Once the investor has moved on, most Kopermas cooperatives are left with a badly damaged, logged-over area. Only the poorest quality trees, if any, are left behind. The cooperatives have neither the capital nor the skills needed to regenerate or replant their degraded forest land.

Our surveys of biophysical conditions in the three concession areas after logging indicate that the rapid logging model adopted by investors has caused damage to 57.61% of remaining trees (diameters of 20 cm and larger), consisting of canopy damage (26.65%), stem damage (17.20%) and root damage (13.75%). The high intensity of damage to remaining trees in Kopermas areas is caused by the rush to reach production targets within a short timeframe (one year).

There is potential for this situation to be improved when Manodwari District's IHPHA permit is implemented. In contrast to the national and provincial government's vague 'cut one plant two' requirement, this policy clearly specifies the silviculture system to be used in each cutting block. Twenty five per cent of the area should be cleared using a 'clear felling with artificial regeneration' system (THPB), 32% using the TPTI system, with the remaining 48% set aside as seed banks for regenerating logged-over areas and as conservation zones to preserve NTFPs, hunting habitats and ecological functions (See Section 8 of the Decree of the District Head of Manokwari No. 274 of 2004).

Another research finding also shows the potential of the Kopermas system: of the three concessions involved in this study, only the Putra Bondi Indah Kopermas took the environmental impact of its logging activities

into account. Although its investor partner did not undertake any replanting, the community itself allocated 10% of its volume production payment to reforesting logged-over areas. This counters the popular belief outside Papua that the Kopermas cooperative model damages forests: it is the exploitation and distortion of this model by external investors that damages forests. The customary land-rights holders live in the Kopermas working areas, which may also explain why our research team recorded a stronger feeling of responsibility for the environmental impact of their business activities in these areas. This community was also the most closely involved in applying for the permit and managing the concession area, demonstrating that the model has good potential when communities have greater control over decision-making processes and operational activities. They have greater incentives and commitment to preserve the forest resources that support their livelihoods.

5.5. Ecological and Downstream Impacts

In broad terms, forests have three functions for humans, namely an economic function, an environmental/protective function and a socio-cultural function. If one of these functions is lost or disrupted, the other functions will also be affected (but not necessarily negatively). Efforts to protect and balance these functions are inextricably linked to the technical ability of those responsible for forest management.

Focus Group Discussions (FGDs) and interviews at the village level found that the attitudes of local communities towards sustaining forests have changed rapidly since decentralization. Partnership with outside investors has introduced the concept that forests can generate cash incomes and facilitate access to the mainstream economy. When partners appear offering previously unheard-of sums of money, communities are attracted to the highest bidder without necessarily considering how they will sustain their forest resources for the future. National policies and regulations on forest utilization exacerbate this problem. These policies also focus on timber as a commercial resource; they do not pay sufficient attention to longer-term rehabilitation or regeneration

activities. Likewise, the abundant non-timber forest potential to support sustainable livelihoods in Papua has been neglected.

In the case of the Warbiadi Kopermas cooperative, the customary land-rights holder (*pemilik ulayat*) lives outside the area, in Manokwari. As a result, the local community does not have sufficient access to the cooperative or its investment partner, CV. Sinar Terang. Watariri village, lying downstream of the Warbiadi Kopermas concession, has experienced the direct impact of forest utilization activities carried out by CV. Sinar Terang. Several villages in this area complained about environmental degradation in the wake of the company's logging operations. The most common complaint concerned the availability and quality of drinking water. Since the company began logging in 2002 the water supply becomes cloudy whenever it rains and has become more irregular. However, local villagers said that they were powerless to do anything about this, as no action can be taken without the customary landowner's permission.

In theory, as communities still own their forest land under the Kopermas model, they should still have access to their local forest areas for hunting and to harvest non-timber products. Local people rely heavily on non-timber products and hunting for subsistence needs. However, local discussions revealed that it has become increasingly difficult to find game around the concessions.

Once again, it seems that the local government is aware of and has addressed this issue in its new IHPHA policy. IHPHA permits will be granted only if 48% of the IHPHA concession area is allocated for seed-banks and conservation areas; no logging will be allowed within this area. The aim is to ensure that the concession areas still provide viable habitat for game and to preserve valuable trees and plants to sustain the forest's protective ecological functions for future generations.

5.6. Regional and Central Government Revenues and Law Enforcement

Manokwari District Government receives district forestry levies, DR and PSDH from

Kopermas cooperatives' investment partners.

The sources and distribution of regional and central government revenues drawn from forest management under the Kopermas and HPH systems are presented in Table 10.

If assessed as a revenue source for the government, the decentralized IPK-MA system generates income for the provincial and central governments from DR and PSDH. Prior to decentralization, under the centrally-issued HPH system, DR and PSDH payments, the HPH permit fee, grading fee and PBB were remitted to the central administration. Thus, it is not surprising that the interests of HPH concessionaires are still given priority by central government as it receives a greater income from DR and grading fees levied on HPHs.

The Meyuosusra and Putra Bondi Indah Kopermas cooperatives' partners paid their DR and PSDH payments in full. This is because they made their payments before the timber was shipped, therefore the government was able to assess the amount of tax due. The Warbiadi Kopermas investment partner avoided paying the full amount of DR and PSDH due, as payments were made after the timber was shipped to the purchaser. This investment partner acquired four Permits to Transport Timber and Forest Products (SKSHH). In theory, he should have paid tax before these permits were issued, however, he was able to ship the timber to Surabaya despite the fact that he paid the taxes due on only two of the four transportation permits. What is surprising is that the district and provincial governments had no record of a permit for this area, yet he did pay some tax.

Table 11 presents the gross timber production, and DR and PSDH payments made for the three Kopermas cooperatives. These records show that the Warbiadi investment partner paid less 0.62% of the taxes due on timber harvested. Law enforcement remains extremely weak, and no sanction were imposed on this investment partner for non-payment of tax, failing to meet the commitment he had made under the informal agreement with the local community, or failing to reforest or rehabilitate the area logged.

Table 10. Sources and proportions of regional and central government revenue from forestry

Forest manager	Source of revenue		Value	Proportion (%)	
				Regional govt.	Central govt.
Kopermas/ partner	Reforestation Fund levies (DR)	Meranti (<i>Shorea</i> spp.)	US\$ 13 /m ³	40	60
		Mixed forest woods	US\$ 10.5/m ³	40	60
		Fancy plywood	US\$ 18/m ³	40	60
	Forest Resource Rent Provision (PSDH) ¹⁾	Meranti (<i>Shorea</i> spp.)	US\$ 5.9/m ³	80	20
		Mixed forest woods	US\$ 2.9/m ³	80	20
		Fancy plywood	US\$ 10.06/m ³	80	20
HPH concession	HPH permit		US\$ 0.17/ha	80	20
	DR	Meranti (<i>Shorea</i> spp.)	US\$ 13/m ³	40	60
		Mixed forest woods	US\$ 10.5/m ³	40	60
		Fancy plywood	US\$ 18/m ³	40	60
	PSDH	Meranti (<i>Shorea</i> spp.)	US\$ 5.9/m ³	80	20
		Mixed forest woods	US\$ 2.95/m ³	80	20
		Fancy plywood	US\$ 10.06/m ³	80	20
	Grading Fee		US\$ 0.04/ m ³	0	100
	Building and Land Tax (PBB)		US\$ 0.18/ha on 5% of the area to be logged (RKT)	90	10

1). Decree of the Minister of Forestry and Plantations No. 858/Kpts-II/1999.

2). The distribution percentages for HPH permits, PSDH, DR and PBB are based on Law No. 25 of 1999.

Table 11. DR and PSDH payments by the Kopermas cooperatives

Kopermas cooperative	Production Total		PSDH payment (Rp.)		DR payment (US\$)	
	Type of wood	Volume (m ³)	Target	Actual	Target	Actual
P. Bondi Indah	Meranti	8 859.22	364 999.86	366 771.71	115 169.86	115 169.86
Warbiadi	Meranti	11 203.60	461 586.67	128	145 646.28	41 186.01
	Mixed forest	914.03	20 200 063.00	413.16	9 597.32	
Meyuosusra	Meranti	4 011.53	212 611.09	259	80 230.60	83 488.39
	Mixed forest	306.38	8 119 990.00	222.05	3 982.94	

6.1. Introduction

Policies introduced in Papua after decentralization had the official objective of maximizing the development and poverty alleviation functions of forests by involving local communities more closely in managing the forestry sector. The previous sections looked at the impacts of this new paradigm of forest management. There is still some way to go before Papua achieves a forest management model that is suited to local forestry conditions and local people's actual needs. The first step is for the provincial and district governments to demonstrate political will by involving local people in drafting more suitable policies and devising better ways to implement them.

Community empowerment will also be vital to achieving sustainable forestry-sector development. Empowering communities will ultimately give them a more equal bargaining position when it comes to receiving a fair and sustainable share of the benefits from forest management. Empowerment also means promoting the communities' active involvement in the entire forest management process. Critically, this goal is highly dependent on building local communities' independence by strengthening their capacity for forest management, policy involvement, and negotiation with outsiders based on their recognized land rights.

6.2. Local Community Capacity for Forest Management

A key strategic issue is reforming the current Kopermas model and ensuring that customary communities are empowered to secure better outcomes for themselves from this model in the future. The weaknesses here relate to the Kopermas groups' lack of capacity to

implement the Timber Logging Permit for Customary Community (IPK-MA) regulations and the unequal partnership between the groups and the investors. Problems with the current model are also rooted in the low level of human resource capacity in the local communities, extremely limited working capital, and negligible community involvement in the permit application process.

Communities will achieve equality if they have the capability to assess and manage their resources. Determining suitable empowerment programmes for customary communities will involve focussing on several solutions highlighted by participants in this study. Solutions include, for example, developing the capacity of local people to run Kopermas cooperatives, strengthening the capital base, and involving customary communities in the forest utilization process. The communities also need to be involved in reviewing existing IPK-MA regulations/policies in order that these are clear and practicable on the ground. Policy success will also be strengthened by providing a control function in involving a wider range of stakeholders in policy formulation and giving local communities a greater role in forest management and policy enforcement.

This study established several parameters for evaluating the capacity of local communities. The parameters include levels of formal education and practical experience of forest management, processing forest products, access to markets, and access to information regarding current policy regulations in the realm of forest management. Our research found that local communities have low capacity in all these areas. For example, at even the most fundamental level, a large proportion of the customary communities (48.4%) have never

been to school and only 8.8% are graduates of senior high school or higher education. Providing access to at least primary school education for all remote forest communities should, therefore, be a core objective for district and provincial-level governments.

The remainder of this section outlines various aspects of community empowerment, or capacity building that will help achieve equitable and inclusive forest management in Papua, beginning with a discussion of how statutory systems could be adapted to accommodate customary governance norms and practices.

6.3. Involving Local Communities and Adapting Policy to Accommodate Traditional and Statutory Governance Systems

In relation to current legislation on forest management in Papua, our research found that local communities living near or in forest areas had little knowledge or understanding of forest policies and their new rights, let alone their application. This lack of knowledge was clearly highlighted during Focus Group Discussions (FGDs) and workshops held in Manokwari with local communities and local government representatives.

Discussions indicated that current processes for socializing (*sosialisasi*) new policies in Manokwari are ineffective. Kopermas cooperative managers were not involved in policy-making processes, let alone local community members. The legislation was drafted using a top-down approach with little or no consultation with local people. For example, most managers of the Kopermas cooperatives and Customary Community Organizations (LMHA) in Manokwari knew little about the IHPHA permits (Permits for Management of Customary Forests), granted by the Manokwari District Head since April 2004. By September 2004, the socialization process had been limited to a small circle of stakeholders such as intellectuals/academics and staff of related government agencies. There has been almost no dissemination of information through the media. However,

despite this lack of involvement, the new district IHPHA policy might well deliver better results for local communities than the provincially issued IPK-MA permits studied here. To date, the only way for a Kopermas cooperative to access forest benefits legally in Manokwari has been by possessing a provincial permit. Until communities have more information about this new type of permit, they will continue to make choices based on inadequate information about their various legal rights and the opportunities open to them.

Another issue raised by local stakeholders was that customary communities' ownership rights to natural resources on their traditional lands remain limited to informal acknowledgement by the government. Beyond the right to apply for a permit and receive compensation from existing concession holders, traditionally recognized community land ownership and resource-use rights have yet to be formally recognized in statutory laws and regulations. This places communities in a weak position not just when it comes to negotiating contracts with partners for forest concessions but also when it comes to policy-making related to every aspect of forest management processes on their traditional lands.

The existence of different systems for acknowledging land rights was one example of the disjointed relationship between statutory regulations and customary laws and practice. The gap between customary and statutory governance systems was a problem commonly acknowledged at policy workshops and FGDs. Over the last 30 years customary laws and norms have gradually been superseded by statutory laws. Local stakeholders felt that current statutory forestry legislation – both at the provincial and national levels – fails to accommodate Papua's customary laws and local people's practical needs. When it comes to implementation on the ground, the local people's understanding of forest governance systems is still based on *de facto* customary laws. Given the clash between statutory laws and *de facto* practices on the ground, stakeholders agreed that traditional and modern governance systems need to adapt to each other to form a more pragmatic new governance system.

As envisioned by local stakeholders, the

new system must provide local communities with clear protection and rights under the formal governance system, and practical access to the mainstream economy. There was a universal feeling among local people that one solution would be to give an active role and support to local community leaders and clan representatives in drafting and proposing a new forestry policy for consideration by the district and provincial governments.

During the Manokwari workshops, local stakeholders also suggested that this policy-formation process should be based on an extensive programme of mapping and documenting different customary community land-rights areas and their respective methods of forest governance. By officially recognizing customary land rights, boundaries and local governance norms, local people felt that new policies and capacity-building programmes would be more realistic and have a higher chance of success. Stakeholders also pointed out that ensuring inclusive village representation also required institutional capacity building *within* local communities. This would help ensure that inputs served the needs of the wider community and not just the interests of local elites.

During the workshops, the local people pointed out that if they felt more involved in policy formulation and could see that their wishes and interests were accommodated in the final policies they would feel more responsibility for implementing a regulation/policy. In addition to this, local people felt that it was equally important to conduct more intensive and sustained public-awareness campaigns regarding existing regulations and policies.

6.4. Technical Capacity Building

Once a concession is logged out, the limited direct employment opportunities and short-term windfall payments disappear, leaving an exhausted resource and less livelihood security than before logging started. Local people in all three of the Kopermas concessions told us they believed that technical assistance to improve their timber production and forest regeneration skills would help ensure the sustainability

of timber resources and security of their livelihoods in the future.

Our research indicated that the current practice of using heavy machinery is not suited to the capacity of customary communities and has a negative impact on the sustainability of local forest resources; therefore the use of a semi-mechanical system would perhaps better guarantee the long-term sustainability of forest resources, whilst allowing greater absorption of local labour. Efforts to find a solution to this problem could be made through the drafting of a well-considered action plan in partnership with local communities before starting logging activities. The potential of the cutting block area to be utilized must be documented and agreed with the local communities in advance. Post-logging rehabilitation plans should also be drafted and agreed by all parties before logging starts.

6.5. Representing and Supporting Local Communities

6.5.1. Direct political representation

When the government granted special autonomy to Papua it should also have prepared supporting mechanisms for the implementation of decentralization. The primary mechanism for local support was the proposed establishment of a democratically elected body, the *Majelis Rakyat Papua* (MRP). The central administration in Jakarta has to authorize the candidates put forward for the democratic election of members to the MRP. Although the list of proposed candidates was provided to central government before the deadline set (July 2002), the government has yet to ratify the list, and until central government approves the list of proposed candidates the MRP cannot be elected. This means that regulations deemed by the central administration to relate specifically to indigenous Papuan interests, including land-rights issues, cannot yet become laws.

Once it is established, the MRP will be the highest assembly representing Papua's customary communities. As a result of the delay in creating the MRP, LMHAs, the organizations that represent customary communities' rights,

still have difficulty in obtaining formal recognition from the government.

This situation offers limited opportunities for organizational capacity building for the customary communities and for passing autonomous regulations explicitly recognizing the rights of local communities when it comes to their traditionally owned land and resources. As a result, LMHAs have received little support from either central or local governments for activities aimed at assessing the development potential of forests over which they have customary land rights.

The LMHAs can directly articulate the aspirations of customary communities in natural-resource development processes. However, the existence of the LMHAs has yet to be formally acknowledged. They have yet to secure an official role within regional and district government decision-making structures. They have not been actively involved in policy-making processes on a regular basis. The role of the LMHAs in relation to IPK-MA forest utilization has so far been limited to acting as a centre for receiving complaints and resolving conflicts between traditional land-rights holders, or between the customary community and commercial partners. Without the formal recognition of LMHAs, and the allocation of clear roles and responsibilities to them, customary communities do not yet have a legally recognized representative in the forest-management process.

6.5.2. Government support and representation

The government's role is described explicitly in Section 66 of Forestry Law No. 41/1999. This law states that the government is required to determine rules, guidance and limits on how Kopermas cooperatives (and their partners) should manage forest concessions, and to encourage the preservation of forest functions (economic, social and environmental) for the future. Customary communities and their Kopermas cooperatives must be fully involved in all forest-management activities. The government's role is to a) ensure the preservation of the forests' functions, b) develop the communities' capacities and facilitate

empowerment, and c) ensure sustainable and fair distribution of benefits.

It was commonly hoped that the decentralized forest management system would empower the regional government to design and implement policies and management models tailored to local communities' socio-economic conditions. With their proximity to local communities and forest resources, it was assumed that regional governments would be in a better position to formulate successful forest development policies based on more accurate understanding of forest conditions and the hardships faced by local communities on the ground.

However, in practice, the government's role has remained limited to issuing new regulations. Beyond this, the process of implementing and enforcing policies in the field remains under-resourced and poorly supervised. This is apparent from the role of local government in implementing IPK-MA permits; it is oriented mainly to issuing permits and determining the amount of compensation to be received by the customary communities. There are as yet no clear and transparent mechanisms for monitoring and evaluating policy impacts or ensuring compliance; this is due mainly to a lack of resources and very unclear lines of accountability.

Today, forming Kopermas cooperatives is the only way in which customary communities in Manokwari can obtain legal rights to benefit from forestry. Whilst it is not yet as effective as it could be, the Kopermas cooperative model has definitely improved the bargaining position of customary communities vis-à-vis external parties (HPH concession holders or private investors) in areas where they hold customary land rights.

6.5.3. The roles of Kopermas cooperatives

The concepts of Social Forestry or Community-based Forest Management (CBFM) envisage a forest management model that can make the largest possible contribution to solving the economic problems of communities living in and around forests. The adoption of these concepts in the field needs to be planned in a

participative manner to ensure that it does not disrupt the benefits that communities already derive from their forests. Ideally, the goals of managers should be to improve welfare and develop community empowerment whilst improving the quality of the forest. Their goal should not simply be to maximize short-term profits from concessions. Forest management under the Kopermas system is in essence an attempt to apply CBFM. However, implementing CBFM in the field can still be seen as a new form of profit-oriented, timber-extraction regime.

Under these conditions, the benefits received by the community remain limited to short-lived, direct cash benefits from logging. The indirect impacts of logging tend to be negative; they include disruption to the drinking-water supply, decreasing areas of habitat for wildlife for hunting, and increasingly limited access to non-timber forest products.

In many cases, the role of the Kopermas cooperatives in managing small-scale concessions is limited to receiving compensation from a commercial partner. Commercial partners are then responsible for every aspect of managing the Kopermas group's forest areas. Given their limited role, it is difficult to expect the Kopermas groups to actively involve all the villagers in their area. In these cases, the Kopermas model merely fosters community dependency on external partners and/or investors.

The situation was very different where Kopermas groups had been more actively involved in managing the new concession (such as the Putra Bondi Indah Kopermas). The difference here was that this group itself had sought external investors, and, critically, it was involved from the outset in the permit application process. This strengthened the group's position as it was able to set conditions before the permit was approved rather than have to accept conditions set by the investor because the investor was controlling the permit application process. This case demonstrates that active community participation is vital if small-scale concessions are to benefit customary communities. This community has strengthened its bargaining position by asserting its land-ownership rights. As a result, the formation of

a Kopermas cooperative has directly improved all village members' livelihoods and incomes, although their activities have admittedly had a stronger focus on short-term benefits than on preserving their resources as a permanent source of income and environmental services.

6.5.4. Non-governmental organizations (NGOs), academics and research institutions

During our workshops, stakeholders defined the role of NGOs, research institutions and academics as being to study and formulate empowerment models for improving customary communities' involvement and benefits from forest management. Another task they should undertake was identified as assisting communities with IPK-MA permit implementation. Efforts to involve communities (through Kopermas cooperatives) must also be accompanied by adjustments in national forest policy to accommodate local cultures, and vice versa. Stakeholders also felt that NGOs, academics and research institutions had a potentially useful role to play in providing relevant findings to support the process of streamlining statutory and customary governance systems in this way.

Participants in our workshops felt strongly that forestry policies must shift from a state-based and centralistic approach to a community-based system, which is better suited to local wisdom. In the same vein, forest utilization methods/techniques must be designed so that they are better suited to local ecological conditions and can be implemented easily by local communities. There was consensus that a policy, however perfect, will not have a positive impact if the target group for the policy (e.g., local communities) does not know about, or implement, it. Therefore stakeholders identified a need to develop the capacities of customary institutions so that in the long run they are able to use the forest management techniques stipulated by government, or, better still, they are able to work with government partners to develop their own management techniques.

Finally, it was also suggested that more experienced stakeholders involved in forestry management in Manokwari – including the

Forestry Research and Development section, the District Forestry Office, NGOs, local government and academics – could do more to support local communities. One option was that they start by collaborating with local customary community organizations, including both LMHAs and Kopermas cooperatives. The objective would be to jointly draft a multi-stakeholder forest management model under which customary communities are treated as being equal to other stakeholders in the decision-making process. It is hoped that this model could accommodate local (customary) interests alongside other, broader interests (regional and national), which has been a key challenge in the application of special autonomy for the Province of Papua.

6.5.5. Stakeholder analysis

In the final analysis, our research findings showed that only three stakeholders – Kopermas cooperatives, investors and the government – have a significant role in the implementation of IPK-MA permits at present. The government's role is limited to issuing IPK-MA permits, without further effort to fulfil its advisory and supervisory roles. External investors were seen by those involved in this research at the village level as very powerful actors who use the Kopermas cooperatives as a façade. In reality, these partners hijack the majority of benefits and management controls that are intended to benefit local communities.

To date, coordination between the Kopermas cooperatives, investors and the government from the outset of the application process has been extremely rare. Local people had a strong impression that the investors are, in fact, very reluctant to involve the government in negotiations. This problem is made worse by the fact that the customary communities do not fully trust the government to facilitate a better deal with commercial partners for them. Currently, dialogue with the government usually occurs only in relation to contract violations by the partners to the detriment of the community. In this regard, improved coordination and communication between

these three stakeholders is required from the outset.

From the results from interviews, FGDs and workshops held during this research project we have summarized local stakeholders' perceptions when it comes to allocating functions and roles to different stakeholders involved in forest management under the Kopermas system in Manokwari (see Table 12).

Whilst this is the ideal vision of different stakeholders' roles, during one of our workshops we facilitated local stakeholders to identify and map the actual relationships between the main stakeholders with roles in the IPK-MA forest concession system in Manokwari District. The results are presented in the Venn diagram below; the arrows indicate the strength and frequency of contact or cooperation between the various stakeholders (Figure 2).

Figure 2. A diagram of stakeholders with roles in IPK-MA forest utilization in Manokwari District in the decentralization era

The figure shows that many stakeholders perceived the relationship between investors and government to be almost non-existent. Although many of the investors are involved in the permit application process, this is carried out officially in the name of a local customary community's Kopermas cooperative. Thus, there is no specific agreement between the government and investors to ensure that the permit is implemented properly in the field.

Table 12. Stakeholders in the management of customary community forests in Manokwari

Stakeholder	Description	Role
Kopermas Cooperative	<ul style="list-style-type: none"> An economic cooperative set up by customary communities to manage local forest concessions. 	<ul style="list-style-type: none"> Represents customary communities' economic activities Is a means for improving the power/bargaining position of the customary communities vis-à-vis their forest resources Regulates and distributes the benefits fairly to all members of customary communities <p>In partnership with investor/government:</p> <ul style="list-style-type: none"> Utilizes forest Pays taxes for forest utilization Fulfills obligations of post-logging forest rehabilitation
Adat Chief (Chief of a Customary Group)	<ul style="list-style-type: none"> Usufruct land-rights holder Clan leader 	<ul style="list-style-type: none"> Final decision-maker in the clan Voices the opinions of the customary community Represents the customary community in decision-making and negotiations with government and/or external investors Resolves conflict within the clan
Customary community	<ul style="list-style-type: none"> Usufruct land-rights holders Members of customary community (<i>anggota ulayat</i>) 	<ul style="list-style-type: none"> Formulates and makes decisions on the utilization of forest resources and the distribution of the benefits to all members of the customary community
Customary Community Organization (LMHA)	<ul style="list-style-type: none"> Organization set up to directly represent the customary community's interests across a range of issues, inc. forestry. 	<ul style="list-style-type: none"> Offers opinions on, and approval for, permits, the forest resource utilization model and the distribution of benefits to the members of the customary community Represents the customary community in disputes with partners/government Handles conflicts between different communities
Investors/ Partners	<ul style="list-style-type: none"> Providers of capital and technology for forest management in return for land-use rights and share of profits Organizers of knowledge and skills transfer Providers of access to markets 	<p>In partnership with Kopermas/government</p> <ul style="list-style-type: none"> Utilize forest Pay taxes for forest utilization Fulfil obligations of post-logging forest rehabilitation
Wider community		Receives benefits and suffers impacts
Government	<ul style="list-style-type: none"> Regulator, director, controller and evaluator of forest management implementation by Kopermas/partners 	<ul style="list-style-type: none"> Formulates, determines and publicizes regulations and policies on forest management under the Kopermas system in partnership with communities and investors Accepts or rejects IPK-MA applications Monitors and evaluates the implementation of IPK-MAs in partnership with communities and investors. Adapts policies accordingly
NGOs, academics, research institutions	Evaluators of forest management models post-decentralization.	<ul style="list-style-type: none"> Formulate better forest management models Provide assistance for community empowerment Act as facilitators for customary community groups and the government (advocacy function)

7.1. Conclusions

Special autonomy in Papua has given positive opportunities to the regional (provincial and district) government and to customary communities to play a larger role in the development of Papua's forestry sector.

Central government legislation on community forestry was aimed initially at encouraging community empowerment processes. However, the legislation is not yet entirely successful as it does not take into account the socio-economic and ecological conditions in Papua nor the specific characteristics of prevailing customary law. Central policies and regulations governing forestry-based development opportunities for communities living in extreme poverty tend to be unclear and inconsistent, both in terms of their legal drafting and guidelines on implementation.

As a result, our research concludes that the only option left for local governments is to draft district and provincial regulations that try to synthesize formal and customary laws on natural-resource management and ownership rights. This will result in policies and regulations that can accommodate the interests of all stakeholders in a balanced way. In comparison with the provincial government's IPK-MA permit (Timber Logging Permit for a Customary Community), the stipulations for Manokwari District Government's new IHPHA permits (Permits for Management of Customary Forests) should be relatively successful in accommodating local realities and addressing many of the problems of the provincial permit system. How effective this new policy will be when it comes to implementation in the field needs further study.

Through IPK-MA and IHPHA permits,

customary communities can be directly involved in forest management, at least when it comes to managing a commercial concession. However, much effort is needed to empower customary organizations and individual customary community members to strive for independence in managing their own natural resources.

It was hoped that Kopermas cooperatives would provide communities with a legal means to realize community aspirations for their traditional forest lands. In reality the cooperatives have been hijacked by HPH (Large-scale Commercial Forest Concession) concessionaires and non-HPH investors as a simple but cheap legal prerequisite for exploiting timber on traditionally owned land. The main factors behind the failure to empower customary communities are low levels of information about government policy and their rights; low capacity, facilities and skills for commercial forest management; and lack of capital for investment. The single most influential factor in securing benefits for local communities under decentralization has been the strength and government recognition of the traditional property-rights system operating in Papua.

7.2. Recommendations

The provincial government and its technical agencies need to be proactive in facilitating community empowerment efforts. To strengthen communication between stakeholders, a district-level forest development forum needs to be established where stakeholders can meet routinely and make decisions together. A similar forum could be established at the provincial level to meet periodically and discuss problems that have emerged at the district level. The

district government and relevant agencies also need to play a more proactive role. This could include providing assistance, advice and training on forest management for customary communities. This is badly needed if the goal of customary community empowerment in forest management is to be achieved.

More participative policy/decision-making mechanisms are also needed, including better socialization of existing and proposed forestry regulations. This could start by developing the fundamental thinking behind the concept of forest management by customary communities in partnership with local communities. What do they want to achieve? Is it realistic? Are local communities likely to benefit? Attention should also be focussed on the requirements and obligations that government will impose on different stakeholders through its policies, including appropriate sanctions for non-compliance and mechanisms for involving local communities in monitoring and enforcement. Thus, communities can be involved in making the best decisions regarding the management and protection of their natural resources.

When deciding on permit applications, the provincial and district governments should conduct more comprehensive studies. This way decisions will not be based merely on fulfilling administrative requirements on paper but also on field observations and consultations with local communities in the affected areas. If necessary, the provincial government could consider providing training on how to assess the resource potential of customary community forests alongside the potential impacts of a concession, in collaboration with other stakeholders (research institutions, academics and non-governmental organizations).

Increased coordination between provincial and district agencies is required to avoid overlaps in issuing IPK-MA permits (by the provincial government) and IHPHA permits (by the district government) and to ensure that logging operations in the field are based on a legal permit and to enforce tax payments. In addition, joint provincial and district forest spatial planning processes need to be developed, in conjunction with other relevant stakeholders involved in forest management in Manokwari.

Mechanisms for providing guidance and

training in forest management for customary communities could be established through comparative studies of different concession areas to highlight examples of good practice. Options for delivering community training would be to require investors to provide training as a condition of being granted a permit, and to include community training as part of the proposed work programme of the District Forestry Offices. Learning processes would benefit from using easily accessible media such as video documentation, shown to different audiences in order to share positive and negative experiences between different communities. Specific training needs include sessions on how to organize and manage community cooperatives, technical forest management skills, reforestation techniques, processing forest by-products, agricultural processing and marketing of products. Stakeholders suggested that this training could be funded from a range of sources. One source could be drawn from the Kopermas cooperatives' share of profit. Other funds could possibly be obtained by supporting village consultative bodies to press for training needed in their area at the District Parliament, training costs could also be included in the BP3D (Supervisory Regional Development and Planning Board) programmes of the District Forestry Office and the District Cooperatives Office. Thus, the benefits from forestry activities can be returned to the community by providing learning opportunities to increase skills so that they can manage natural resources more productively and sustainably in the future.

The investors' obligation to support local communities could be strengthened by requiring that they have a recommendation from the Regional Investment and Promotion Board as well as the District Forestry Office before a permit is issued. These recommendations should be made only if the relevant agencies are satisfied that investors have experienced staff, with appropriate technical skills in the fields of forestry management and training, and are working in partnership with cooperatives.

Community involvement in policy and decision-making could be strengthened by establishing Customary Community Organizations (LMHAs) in every village. Their role as representative organizations

should be strengthened so that they have clear legal status and can play a greater role in natural-resource management in their area. Through these LMHAs, participatory mapping should be conducted to assess the real potential of natural resources owned by each clan and to establish the best possible planning for sustainable management in the future. Greater emphasis should also be placed on drafting policies that are also based on the customary communities' cultural wisdom in natural-resource management.

All these points need to be laid out in a regional regulation (*Perda*) that specifically and comprehensively regulates management of the forests of customary communities and accommodates various interests, including those of the government, investors, customary communities and other stakeholders. This regional regulation should be formulated by involving all stakeholders. The regional governments (both district and provincial) could act as the main facilitator, and then take

forward the draft proposal to the [Regional] House of Representatives for ratification.

Coordination between relevant stakeholders in the forestry sector at local, district and provincial levels needs to be developed and strengthened continuously. It should be emphasized that in order to revise existing policies, the provincial and district governments must cooperate with each other to establish a division of roles and responsibilities that is clear to all parties, and also to determine the sanctions for various types of violations. The District Forestry Office should also be given a greater role in the assessment process for permit applications lodged with the provincial government, allowing for balanced supervision of the implementation of such permits.

Each of these recommendations is inextricably linked to the main goal of regional forest policy-making, namely protecting the rights of local communities by lifting them out of poverty and sustaining Papua's valuable natural resources for the future.

¹ Papua has 35 885 590.58 ha of forest cover (Anonymous 2002).

² 1 122 900.14 m³ in 2001 and 649 899.77 m³ in 2002.

³ The district's share of forestry revenues are 80% from Forest Resources Rent Provision (PSDH) and Forest Concession Licence Fees (IHPH), and 40% from Reforestation Funds (DR).

⁴ Specifically stated in Chapter XI, Article 43, of the Special Autonomy Law and Article 67 (1) of the Forestry Law.

⁵ The Ministry of Forestry and Estate Crops Decree No. 318/Kpts-II/1999 on Community Participation in Forest Utilization and No. 317/Kpts-II/1999 on the Rights of Customary Communities to Harvest Forest Products (HPHH-MA) from Production Forest.

⁶ Papua Governor's Decree No. 522.2/3386/SET/2002 on the Arrangement for the Rights of Customary Communities to Harvest Forest Products (IPK-MA).

⁷ The operational guidelines for IPK-MA were laid out in the Decree of the Head of the Provincial Forestry Office of Papua No. 522.2/1648/2002 on the Implementation Guidelines for IPK-MA.

⁸ The Kopermas cooperative system is regulated according to the Joint Decree of the Minister of Forestry and Estate Crops and the Minister of Cooperatives and Small and Medium-sized Enterprises No. 234/Kpts-IV/1999 and No.01/skb/M/IV/1999, on the Optimization of Cooperatives in the Forestry and Estates Sector and the Decree of the Minister of Cooperatives and Small and Medium Enterprises No. 107/bh/KDK/238/XI/2000 on the Legalization of Community Cooperatives (Kopermas).

⁹ No. 310/Kpts-II/1999 on the Right to Harvest Forest Products (HPHH) and No. 317/Kpts-II/1999 on the Rights of Customary Communities to Harvest Forest Products (HPHH-MA) in Production Forests.

¹⁰ The HPHH system was rescinded with the issue of Ministerial Decree No. 6886/Kpts-II/2002 on the Guidelines for the Granting of IPHH (*Forest Product Harvesting Licence*) in Production Forests. An IPHH might be granted to individuals or cooperatives to harvest timber to a maximum of 20 m³ or non-timber forest products to a maximum of 20 tons. The licence was valid for one year.

¹¹ Implementation Decree of the Director General of Forest Utilization No. 199/Kpts/VI-Set/1999.

¹² Gubernatorial Decree No. 50/2001 on the Standards for Compensating Customary Communities for Timber Taken from Customary Land Right Areas.

¹³ Based on the Decree of the Governor of Papua No. 522.2/3386/SET/2002 on Regulation of the Harvesting of Forest Products by Customary Communities (IPK-MA), which was issued in accordance with the issuance of the Decree of the Director General for Forest Utilization No. 199/Kpts/VI-Set/1999 on the Technical Guidelines for HPHH-MA.

¹⁴ Decree of the District Head No. 274/2004 on Rights for the Management of Customary Community Forests (IHPHA).

¹⁵ Decree of the District Head of Manokwari No. 274/2004 Chapter VI, Section 14.

¹⁶ See Table 1.

¹⁷ See Table 1.

- Anonymous 2002 *Neraca Sumberdaya Alam Daerah Provinsi Papua* [Account of the Natural Resources of Papua Province]. Provincial Forestry Office of Papua, Jayapura, Papua.
- Office of Cooperatives and Small and Medium-sized Enterprises 2002 *Pemberdayaan dan Pengendalian Kopermas yang Bergerak di Bidang Koperasi*. [Empowerment and Control of Kopermas Cooperatives in the Cooperatives Sector]. Office of Cooperatives and Small and Medium-sized Enterprises, Jayapura, Papua.
- Pawitno 2003 *Kontribusi Pendapatan Sub Sektor Kehutanan Terhadap Pendapatan Daerah Di Papua*. [Contribution from the Forestry Sub-sector to Regional Revenue in Papua]. Undergraduate dissertation, Faculty of Forestry, State University of Papua (UNIPA) (Unpublished)
- Provincial Forestry Office of Papua 2002 *Data Ijin Pemungutan Kayu Per Februari 2002 di Kabupaten Manokwari* [Data on Permits for the Harvesting of Timber as of February 2002 in Manokwari District]. Provincial Forestry Office of Papua, Jayapura, Papua.

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