

Promoting the Development of Community Plantation Forests in Boalemo District, Indonesia

Community farm potentially suitable for developing timber plantation
Photo: CIFOR/Dede Rohadi

Introduction

Community Plantation Forests (*Hutan Tanaman Rakyat/HTR*) is amongst the social forestry programs in Indonesia. The program provides access to communities to develop timber plantation business on state forest lands. The HTR program was designed by the Government of Indonesia, c.q. the Ministry of Environment and Forestry (MOEF) to achieve multiple objectives, including to improve income for communities living in areas surrounding forests (*pro-poor*); increase timber supply for the wood industry (*pro-growth and pro-job*); and to rehabilitate degraded forest areas (*pro-environment*) (BAPPENAS 2004). The HTR program was first introduced in 2007, targeting the establishment of HTR areas of 5.4 million hectares by the end of 2016 (Dephut 2007).

The principles of the HTR program are in accordance with current government's Nawa Cita development mission, which further strengthened by speeding up the devolution of 12.7 million hectares of state forests to be managed by communities under the social forestry program^{[1],[2]}. The Indonesian Forestry Statistics (2014) recorded that by the end of 2013, a total of 700,000 hectares of state production forest have been

Key Findings

- In Boalemo district, the initiations of Community Plantation Forest (Hutan Tanaman Rakyat/HTR) program were mostly done by the Forest Management Unit (Kesatuan Pengelolaan Hutan/KPH) Unit V Boalemo, but with lack of farmers' participation.
- Farmers are the main actors of HTR and intensive assistances are needed to enhance the capacity of farmer groups.
- The KPH Unit V Boalemo needs to enhance facilitation activities to the HTR farmer groups. The activities need to be supported by a sufficient budget that should be included in the KPH's budget portfolio. The KPH also needs to facilitate business meetings between HTR farmer groups and companies, either Industrial Timber Plantation (Hutan Tanaman Industri/HTI) or other wood-based industries to develop business partnership.
- Other government's agencies who also implement HTR development programs in Boalemo District have to coordinate with the KPH Unit V prior to implement their programs on the HTR sites.
- The HTR activities should be commercially designed and provide profitable business as an alternative farmers' income sources. Therefore the HTR business have to apply good business practices. The farmers need to adjust their diverse plants with the available market potency.

[1] Target by the end of 2019.

[2] Paper presented by the Deputy of Maritime and Natural Resources, National Planning Agency (BAPPENAS) entitled 'Synergy in the development of environment and forestry sectors' at the national event of 'Socialization of the Strategic Plan of the Ministry of Environment and Forestry', held in Jakarta, 1 September 2015.

allocated for HTR development across 113 districts in the country. Within this allocated area, a total of 190,000 ha HTR Business Licences or *Izin Usaha Pemanfaatan Hasil Hutan Kayu HTR* (IUPHHK-HTR) had been granted to a total of 6,000 licence holders that consist both cooperatives and individuals. The small portion of forest area that has been granted through HTR licences relative to the planned target indicates the extent of constraints and challenges faced in the implementation of HTR program.

Boalemo is one amongst the districts in Indonesia that has been implementing the HTR program since 2014. The Agroforestry and Forestry (AgFor) in Sulawesi project has conducted extensive activities to facilitate implementation of the HTR program in the district. The activities yielded a number of significant findings that serve as inputs for policy makers. The recommendations presented in this policy brief are based on analysis of collected data and information from different sources, including government institutions at the district and provincial levels (the province of Gorontalo), community key informants in the village of Rumbia, and timber traders in Boalemo district.

Progress towards HTR development in Boalemo District

As of 2014, the area of land in the district for which IUPHHK-HTR had been granted covered 521 hectares, or 27 percent of the total allocated area^[3]. The licences had been granted to five HTR farmers' groups in three villages—Rumbia, Wonggahu and Molumbulahe—through the Bupati (Head of District Government) Boalemo Decision No. 231/2014. The remaining gazetted allocated land of 1,404 hectares could not be granted for HTR licences as it located within a Limited Production Forest (*Hutan Produksi Terbatas/HPT*) zone. According to the Directorate General of Planology (Dirjen Planologi) Letter in November 2015, no longer HTR permit will be issued in areas within the HPT zones.^[4]

Observation at the surrounding area of Rumbia village by the AgFor Sulawesi Project Team revealed that no timber planting activities had been conducted in the HTR areas. The study concluded that the development of HTR in the district of Boalemo had been primarily initiated by the Forest Management Unit (FMU) or *Kesatuan Pengelolaan Hutan/KPH* Unit V of Boalemo. The FMU had been actively initiated proposal development of HTR for the communities throughout the district, but the process had not adequately involved community participation. As a result, community members were not highly motivated to invest in timber planting after the HTR licences had been granted.

Demographic data showed that around 50 percent of the village population, of approximately 950 individuals, were in productive working age, ranging from around 20 to 60 years-old. This data indicated that sufficient labour was available to support the implementation of the HTR program. Community also aware that timber planting would improve their land quality, which has steep topographies. The community expected that timber trees would play important role in preventing landslides, providing shade and improving land fertility. In addition, timber trees could serve as household savings. However, members of the community are prioritizing agricultural activities, particularly the maize cultivation, which was amongst the provincial government priority programs.

In order to motivate HTR farmers' groups, the FMU had established a number of demonstration plots, each covering an area of 15 hectares of '*jabon*' (*Anthocephalus cadamba*) plantation for each HTR group. The plantings were done in 2014 and the plantations had grown well. However, after these demonstration plots establishment, the FMU did not provide further assistance or facilitation to the HTR groups, except to restrict their activities on monitoring and evaluating the plots.

Amongst the MOEF Implementing Units (*Unit Pelayanan Teknis/UPT*), the Watershed Management Institute at Bone Bolango (*Balai Pengelolaan Daerah Aliran Sungai/ BPDAS*), which is located in Limboto, has had the mandate to facilitate HTR development in the Province of Gorontalo since 2015. The mandate was transferred from the Production Forests Management Unit (*Balai Pemantauan Pengelolaan Hutan Produksi/BP2HP*), which located in Palu, Central Sulawesi. The mandate was transferred further in 2016 to the new established Social Forestry and Environmental Partnerships Unit (*Balai Perhutanan Sosial dan Kemitraan Lingkungan/PSKL*) in Makassar. This new unit will be responsible to support the development of HTR and other social forestry programs throughout Sulawesi Island.

With the promulgation of Act No. 23/2014, almost all of forestry administration, except the management of Community Forest Parks (*Taman Hutan Rakyat*, TAHURA) was taken back from the district to the provincial authority. The act also transferred the authority on issuing HTR licences and its management responsibility from the Bupati to the Governor (head of province government). The Act will also influence working arrangements of the KPH Unit V Boalemo. A resource person from the Province Office of Forestry, Mining and Energy (*Dinas Kehutanan, Pertambangan dan Energi/Dishutamben*), Samsul Bahri, S.Hut, M.Sc, who was amongst the officers within the office expressed his expectation that the FMU would play more significant roles in developing the HTR program by saying:

'In the future, the KPH Unit V Boalemo should play more active roles in nurturing the HTR development and should not restrict its activities only on monitoring and evaluation. The Province Office of Forestry, Mining and Energy has planned to recruit and provide attractive incentives to forestry facilitators to support HTR farmer groups. The KPH is expected to play active roles in synergizing various HTR programs initiated by different institutions at the field level.'

[3] The total area of land allocated for the Social Forestry Program in the district of Boalemo was 1,925 hectares (Ministry of Forestry Decree No.396/Menhut-II/2010), following revisions to the Regional Spatial Planning (*Rencana Tata Ruang Wilayah/RTRW*) in 2010. Prior to this revision, the area of land allocated was 4,775 hectares.

[4] Based on written interviews with the Head of KPH Unit V Boalemo and the Head of the District-Office of Forestry, Minings and Energy (Dishutamben) on 26 January 2016.

Business stakeholders of Community Timber Plantations in Boalemo

The AgFor Sulawesi Team has analysed related stakeholders with the HTR program in Boalemo. These stakeholders were classified according to their level of influence and interests into four groups (Figure 1): the target group (Quadrant A); the motivator group (Quadrant B); the support group (Quadrant C); and the marginal group (quadrant D). The target group was stakeholders who were both the subjects and direct beneficiaries of business activities generated by the HTR program. While they had significant interests in the program, they had limited degree of influence to direct policies and implementation of the HTR program in the district. The motivator group was stakeholders who had both significant interests and influence over the HTR development program. This group could play significant roles to intervene required policy and program implementation of the HTR. The support group (Quadrant C) was stakeholders who had potential roles in facilitating the HTR program to be aligned with regional planning budget allocation. The marginal group (Quadrant D) was stakeholders with a limited level of influence and whose interests were determined to a significant extent by stakeholders in the other quadrants.

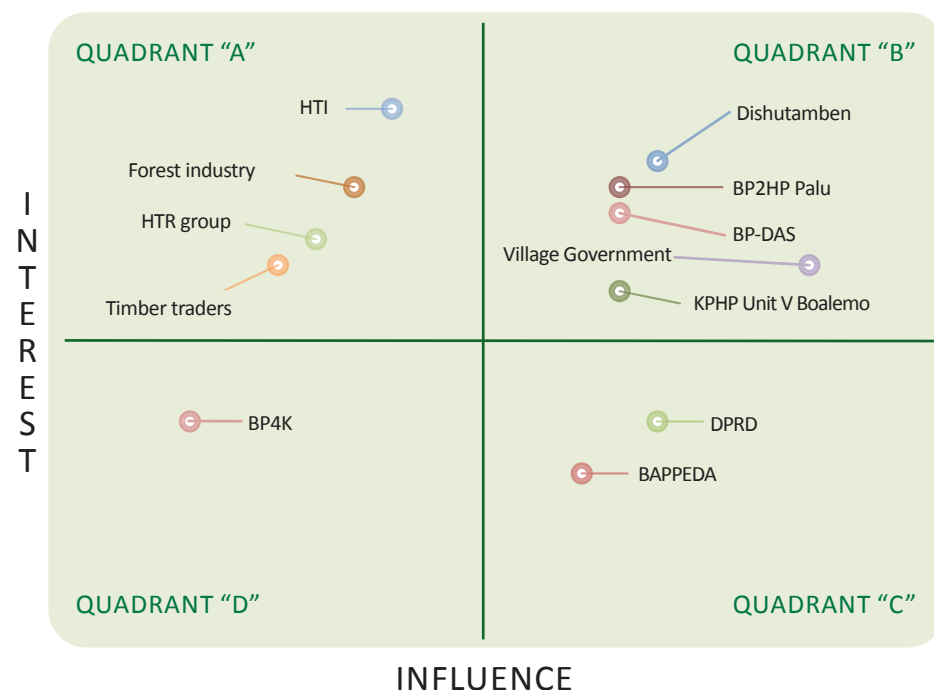


Figure 1. Stakeholders on HTR programs in Boalemo District, Gorontalo Province.

Table 1 sets out in greater detail the nature and extent of the roles and interests of various stakeholders in the HTR development in Boalemo. The analysis demonstrates that there were a number of shared interests between different actors in HTR development. These shared interests represent a form of social capital that could be leveraged to facilitate further development of the HTR program. A higher level of synergy, however would need to develop amongst these various stakeholders.

Timber Market Potency in Boalemo

Interviews with a number of resource persons, including market actors in Boalemo, revealed that the demand for timber in the district cannot be completely met from timber produced in the district. A value-chain study conducted by the team indicated a timber demand of around 6,000 cubic metres of logs (*'kayu bulat'*) just for supplying district government development projects, such as renovations of existing public buildings and to build new schools.^[5] Since 2012, the district government had implemented a moratorium on harvesting timber from natural forests (*'hutan alam'*) despite the fact that timber production from community forest plantations is still limited. Most of the timber demand within the district was fulfilled from timber harvested from Conversion Production Forests (*Hutan Produksi Konversi/HPK*) in the neighbouring districts, particularly Pohuwatu and North Gorontalo, with only a small proportion supply from community forests.

The study also found evidence that a number of sawmills and furniture producers in the district are closed due to limited timber supply. Only two sawmills are active in the district, with a total annual production of less than 3,500 cubic metres. One of these sawmills is in the village of Polohungo and operating at far below its full production capacity.^[6] The other sawmill in Rumbia village is using naturally grown timber on community lands with a mixed species, such as *'nyatoh'* (*Palaquium* sp.), mahogany (*Swietenia* sp.), *'kayu bugis'* (*Koordersiodendron pinnatum*) and *'cempaka'* (*Elmerillia* sp.).

The smallholder private forests in the district were poorly developed. A number of farmers in the villages of Polohungo, Pangi and Ayuhulalo is growing teak, although the trees are relatively young of 10-to-15 years-old. This planting was initiated by a private company that promoted teak seedlings in the 1990s. In general, community do not apply good silvicultural practices on their timber.

The timber value-chain study showed that the price of community timber ranged at around IDR 400,000 (\approx USD 30 at January 2017 rates) per cubic metre for mixed timber species to around IDR 1 million (\approx USD 75) per cubic metre for high quality timber.

The price of teak from community plantations was determined on the basis of diameter. The range of prices for timber logs and sawn timber in Boalemo District is presented in Table 2.

[5] Based on information provided by Yunus Muda, the Head of Boalemo District Office of Forestry, Mining and Energy, on 26 January 2016.

[6] Based on an interview with a sawmill owner in the village of Polohungo, in which he stated that recently he had only provided limited milling services (less than 10 cubic meters per month).

Table 1. Interests and roles of stakeholders involved in the development of HTR in Boalemo District

No.	Stakeholder	Interest	Role
I Quadrant A: Target Group			
1	HTR farmers' groups	<ul style="list-style-type: none"> - Increased income from HTR products - Development of HTR-related businesses - Conservation of forest resources 	<ul style="list-style-type: none"> - Conduct timber planting in HTR area. - Supply timber to local timber industries. - Create job opportunities in forest-based businesses
2	Local timber traders and industries	<ul style="list-style-type: none"> - Opportunities to generate profits from timber sale transactions. - Business sustainability 	<ul style="list-style-type: none"> - Provide market for timber produced by HTR. - supply timber to the industries - Create job opportunities in forest-based businesses
3	Industry/HTI	<ul style="list-style-type: none"> - Secure timber supply to timber industries. - Create positive brand image through the development of environmentally and socially friendly businesses 	<ul style="list-style-type: none"> - Act as business partners for HTR groups - Provide market for timber produced by HTR. - Provide technical assistance to facilitate timber production of the HTR
II Quadrant B: Motivators Group			
1	Regional institutions (KPH Unit V Boalemo; Province Office of Forestry, Mining and Energy; District Office of Forestry, Mining and Energy).	<ul style="list-style-type: none"> - Improved performance and achievement of organizational visions and missions. - Conservation of forest resources. - Improved community livelihoods. - Economic growth. 	<ul style="list-style-type: none"> - Provide technical assistance to strengthen capacities of HTR groups (business development) - Propose and distribute central and regional government assistances, including budgets (APBD) and production inputs (seedlings, equipment)
2	Ministry of Environment and Forestry Implementing Units (BPDAS PS, BP2HP) ^[7]	<ul style="list-style-type: none"> - Performance and achievement of organizational visions and missions. - Conservation of forest resources. - Improved community livelihoods. - Economic growth. 	<ul style="list-style-type: none"> - Formulation of standard norms, guidelines and criteria of forest management. - Provide technical assistance to strengthen capacities of HTR groups (business development) - Propose and distribute central and regional government assistances, including budgets (APBD) and production inputs (seedlings, equipment).
3	Village Government	<ul style="list-style-type: none"> - Improved performance and achievement of organizational visions and missions. - Conservation of forest resources. - Improved community livelihoods. - Economic growth. 	<ul style="list-style-type: none"> - Assist in strengthening business capacity of the HTR group. - Support farmer group's proposals to the regional and central governments - Monitor and report the progress of HTR activities to relevant institutions.
III Quadrant C: Supporting Group			
1	Regional Planning Agency District of Boalemo (<i>Badan Perencanaan Pembangunan Daerah/ BAPPEDA</i>)	<ul style="list-style-type: none"> - Improved performance and achievement of regional development - Improved community livelihoods - Conservation of forest resources 	<ul style="list-style-type: none"> - Allocate regional budget (APBD) to support HTR development. - Coordinate district sectoral programs to facilitate HTR development.
2	Regional House Assembly District of Boalemo (<i>Dewan Perwakilan Rakyat Daerah/DPRD</i>)	<ul style="list-style-type: none"> - Improved performance and community trust. - Improved community livelihoods. - Conservation of forest resources. 	<ul style="list-style-type: none"> - Establish enabling policies to facilitate investment in forestry-based businesses. - Support district government proposals for developing HTR. - Monitor the implementation of regional development programs.
IV Quadrant D: Marginal Group			
1	Implementing Agency for extension on Agriculture, Fisheries and Forestry District of Boalemo (<i>Badan Pelaksanaan Penyuluhan Pertanian, Perikanan dan Kehutanan/BP4K</i>)	<ul style="list-style-type: none"> - Improved performance and achievement of organizational visions and missions. - Conservation of forest resources - Improved community livelihoods 	<ul style="list-style-type: none"> - Provide technical assistance to strengthen capacities of HTR groups (business development)

[7] Based on revisions to the organizational structure of the Ministry of Forestry, the mandate for the guidance of the social forestry programs was transferred from BPDAS PS Bone Bolango to Balai PSKL in Makassar.

Table 2. Prices for community timber in Boalemo

No	Form of timber	Type of timber	Price (IDR/cubic metre)
1.	Logs	Mixed species (<i>Rimba campuran</i>)	400,000 – 600,000
		High quality (<i>Kayu indah</i>)	800,000 – 1,100,000
		Teak	10,000 per centimetre of the diameter of the log
2.	Sawn timber	Mixed species (<i>Rimba campuran</i>)	
		In Boalemo District	1,500,000 – 1,750,000
		In Gorontalo Municipality	2,100,000 – 2,500,000

In general, timber traders (*'pengepul kayu'* or *'balenthe'*) preferred trees of a big diameter, as these provided greater profits.^[8] Diameter is the most significant factor for determining timber price, similar to what found in Java (Stewart et al 2014).

With the presence of an Industrial Timber Plantation (*Hutan Tanaman Industri/HTI*) in North Gorontalo and with their plan to establish a plywood industry in the region, the market opportunities for community timber in Boalemo District are increasing. The AgFor Sulawesi Project Team facilitated initial discussions to develop a business partnership between HTR farmers' groups in the Rumbia village with the HTI company. Through the partnership, the HTR groups would be provided with assistance from the industry on their required production inputs (seedlings, fertilizers) and channeling their timber selling through the company. Further facilitations however are required, to advocate regular communication between HTR farmer groups and the HTI company on this business partnership development.

Challenges facing the development of HTR in Boalemo

The community in Boalemo District, including those HTR licence holders in Rumbia village, had a limited understanding about the goals and purposes of HTR program. The implementation of this program primarily has been driven by Forest Management Unit (FMU) or *Kesatuan Pengelolaan Hutan* (KPH) Boalemo Unit V, who was motivated to meet the office target performance. The limited understanding on HTR program has led to poor motivation of the community to invest in timber plantation. They are expecting more supports from the district government, for instance on providing tree seedlings. They also have limitations to access credit facilities from the *Badan Layanan Umum/BLU*, the financial provider within the Ministry of Environment and Forestry, due to their lack of understanding with the credit application procedures. The relatively low education level (80% of the Rumbia inhabitants had only completed elementary school) is the other constraint on HTR development in this region.

In terms of institutional capacities, the implementation of HTR program in Boalemo District was constrained by coordination issues between government agencies at the central and district levels. The Ministry of Forestry regulation regarding FMU task and responsibilities failed to clearly define the FMU's

[8] The value-chain study indicated that the wood collectors' (*'balenthe'*) profits are higher for transactions involving logs with a diameter greater than 60 cm. Profit margins ranged IDR 2 million–5 million per container for teak logs (24 cubic meters), according to the quality of the wood (information from Haris, a *balenthe* from the village of Ayuhulalo).

duties and functions in the HTR program implementation^[9]. Interviews with staff of FMU Boalemo District indicated that the FMU perceived its role as limited to monitoring and evaluation activities. The frequent changes of the structure and mandate of the Ministry for the Environment and Forestry itself also had an adverse impact on the program implementation. As an example, as previously mentioned that the mandate for providing guidance of HTR implementation in Boalemo District was originally held by BP2HP, which was located in Palu- Central Sulawesi. In 2015, this mandate was transferred to BPDAS Bone Bolango in Limboto, Gorontalo. And then one year later, the mandate was again transferred to a new organization under Directorate General of Social Forestry and Environmental Partnership, the *Balai Perhutanan Sosial dan Kemitraan Lingkungan* (PSKL) located in Makassar. This office hold a mandate for implementing all social forestry programs throughout Sulawesi. The wide geographical area under this office responsibility has a significant impact on the intensity of program implementation. The promulgation of Act No. 23/2014, which transferred authority for the forestry management from district to the provincial level, also prolong the preparation process of the responsible organization to commence actual implementation of activities at community level.

The completed field observation by the AgFor Sulawesi Project Team revealed steep topography of the HTR location with relatively difficult access. The topography would increase operational costs on timber exploitation. The site condition recommends to develop mix agroforestry plantation model on the area, instead of timber monoculture plantation.

Policy recommendations

Further efforts are required to support the development of HTR in Boalemo District by the responsible organizations at both central and regional levels. Increasing capacity of farmers' groups is essential to make them capable in managing profitable HTR business. The HTR farmers' groups need to be strengthened to have an adequate level of technical and business knowledge, including silvicultural techniques, timber market prospects, as well as HTR policies and access to financial capital.

It is also essential to ensure that HTR business is a competitive source of income for farmers. The practical aspect of HTR plantations needs to be adjusted in accordance with timber market as well as non-timber market potency in this area. HTR farmers' groups also need to be nurtured to enable them to work collectively as cooperative business groups and capable to work in partnership with timber-based industries.

The FMU of Boalemo Unit V should play an active role as the nurturing agency at community level. To achieve this, government policies at both central and provincial levels need to clarify the role of the FMU as coordinating agency amongst related government institutions, including the Province Office of Forestry, Mining, and Energy and the technical implementing units under the Ministry of Environment and Forestry (such as Watershed Management Unit or BPDAS, Social Forestry and Environment Partnership Unit or Balai PSKL, and Production Forest Management Unit or BP2HP). The HTR program needs to be supported through committed

[9] Regulation of the Ministry of Forestry No. 6/2010 on Norms, Standards, Procedures and Criteria for KPHP and KPHL, section 3.

funding of both central and regional governments. In particular, the FMU of Boalemo Unit V should intensify cooperation with:

- Social Forestry and Environment Partnership Unit (Balai PSKL Makassar) in implementing HTR program in Boalemo;
- Gorontalo's Province Office of Forestry, Mining, and Energy to facilitate partnership between HTR farmers groups with industrial timber plantation company, as well as to facilitate them on getting necessary timber licences (SVLK, SIPUHH, SIMPONI);^[10]
- Extension Office in Boalemo District in conducting necessary trainings for HTR farmers; and
- The Centre for Forestry Financing (BLU Pusat Pembiayaan Kehutanan) MOEF to facilitate access of farmers to HTR credit.

[10] Timber Legality Assurance System (*Sistem Verifikasi Legalitas Kayu*, SVLK); Information System for the Administration of Forestry Products (*Sistem Informasi Penatausahaan Hasil Hutan*, SIPUHH); Online Information System for the Receipt of National Tax (*Sistem Informasi PNPB*, SIMPONI).

References

- [BAPPENAS] Badan Perencanaan Pembangunan Nasional. 2004. *Strategi Pembangunan Nasional 2004–2009*. Jakarta, Indonesia: Badan Perencanaan Pembangunan Nasional.
- [Dephut] Departemen Kehutanan. 2007. *Dephut alokasikan lahan hutan 5,4 juta ha untuk usaha HTR dengan dukungan dana reboisasi*. Media release S.51/II/PIK-1/2007. Jakarta, Indonesia: Departemen Kehutanan. <http://www.dephut.go.id/index.php>.
- Rohadi D, Herawati T, Padoch C, Race D. 2015. *Mendorong usaha tanaman kayu sebagai bisnis yang menarik bagi petani*. Info Brief No. 128. Bogor, Indonesia: Center for International Forestry Research.
- Stewart HTL, Rohadi D, Manalu P, Herawati T, Oktalina SN, Rohman, Putro WT, Utomo S, Ningrum LW, Hidayat R, Irawanti S, Pramestisuka A, Parlinah N, Bisjoe AR, Muin N, Hayati N, Waka AK, Sumirat BK, Syafii S, Julmansyah, Aryanti ND, Waluyadi YK, Darisman A, Silvia D. 2014. *Research Task 3: Evaluation of the dominant business models of community-based commercial forestry being implemented by government and the private sector*. Report of a study conducted in Gunungkidul, Pati, Bulukumba, Konawe Selatan and Sumbawa, ACIAR Project FST/2008/030 Overcoming constraints to community-based commercial forestry in Indonesia. Canberra, Australia: Australian Centre for International Agricultural Research.

Authors

Dede Rohadi, Iswan Dunggio, Tuti Herawati, Duman Wau, Yahya Laode.

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Canada



For further information please contact:
Dede Rohadi (d.rohadi@cgiar.org)

World Agroforestry Centre (ICRAF)
Southeast Asia Regional Program

Jl. CIFOR, Situ Gede, Sindang Barang, Bogor 16115
[PO Box 161, Bogor 16001] Indonesia
Tel: + (62) 251 8625415 | Fax: + (62) 251 8625416
Email: icraf-indonesia@cgiar.org
www.worldagroforestry.org/region/southeast-asia
blog.worldagroforestry.org

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