



[Bahasa Inggris] | [Indonesian]

MASTER TREEGROWER:

Design, Delivery and Evaluation of an alternative farmer learning approach

[MASTER TREEGROWER: desain, penyampaian, dan evaluasi atas alternatif pendekatan pembelajaran bagi petani hutan rakyat]

Research Task 4 of ACIAR Project ‘Overcoming constraints to community-based commercial forestry in Indonesia’ was to develop a learning model for smallholders involved in commercial forests that would enhance the quality of the timber produced and the value they receive from participating in the commercial timber market. Drawing on the experience gained and recommendations arising from the previous research tasks and the available literature, the team chose to design and test a flexible participatory learning model that could be presented as a short course for a group of farmers in each district based on the Australian Master TreeGrower (MTG) program developed at the University of Melbourne in 1996.

During 2014 seven MTG courses involving 118 smallholder farmers, 27 community leaders and more than 50 presenters were presented in the five research regions across Indonesia. Each course followed a similar 5-part structure that included a review of landholder interests in tree growing, exploration of local market opportunities, training in tree and forest measurement, education in tree growth and forest management, and discussion of future information and support needs.

The 5-part learning approach framework:

1. Day 1: Mastering the art of tree growing
 - a. Importance of farmer decision-making and appropriate design.
 - b. Identification of ‘farmer’ problems and aspirations (short, medium, long term).
 - c. The role and prospects of CBCF in the region.
2. Day 2: Markets
 - a. Product specifications, marketing options, regulations etc.
 - b. Processing and marketing visits.
 - c. Secondary and on-farm markets for forest products.
3. Day 3: Measurement
 - a. Tree and stand assessment relative to product specifications and landholder needs and aspirations (tapes).
 - b. Documenting forest growth for timber, carbon and other values.

Tugas penelitian ke-4 dari kerjasama penelitian ACIAR “Overcoming constraints to community-based commercial forestry in Indonesia” adalah membangun model pembelajaran bagi petani hutan rakyat dalam rangka meningkatkan kualitas hasil kayu dan nilai tambah yang mereka terima dari kegiatan pemasaran kayu komersial. Berkaca pada pengalaman dan rekomendasi yang diperoleh dari tugas-tugas penelitian sebelumnya serta dari berbagai literatur terkait, tim peneliti mendesain dan melakukan uji coba suatu model pembelajaran yang partisipatif dan fleksibel berdasarkan program *Australian Master TreeGrower* (MTG) yang dikembangkan di Universitas Melbourne tahun 1996.

Selama tahun 2014 telah dilaksanakan tujuh pelatihan MTG di semua lokasi penelitian yang melibatkan 118 petani hutan rakyat, 27 tokoh masyarakat dan lebih dari 50 penyaji. Materi pelatihan mencakup lima hal, yakni review ketertarikan petani untuk menanam pohon, eksplorasi peluang pasar kayu lokal, pengukuran pohon dan hutan, pengelolaan pertumbuhan pohon dan hutan, dan diskusi kebutuhan informasi dan dukungan yang masih diperlukan.

Berbagai materi tersebut disajikan selama lima hari pelatihan dengan rincian sebagai berikut:

1. Hari ke-1: Penguasaan ilmu pertumbuhan pohon
 - a. Pentingnya pengambilan keputusan oleh petani dan perencanaan yang tepat.
 - b. Identifikasi permasalahan dan harapan petani (jangka pendek, menengah, dan panjang).
 - c. Peran dan prospek hutan rakyat.
2. Hari ke-2: Pasar
 - a. Spesifikasi produk, pilihan bentuk pemasaran, peraturan, dll.
 - b. Kunjungan ke pabrik untuk memahami proses pengolahan kayu dan pemasaran lebih lanjut.
 - c. Pasar setempat dan pasar sekunder produk hasil hutan.
3. Hari ke-3: Pengukuran
 - a. Penilaian relatif atas pohon dan tegakan sesuai spesifikasi produk dan kebutuhan serta aspirasi petani (meteran pohon).
 - b. Mendokumentasikan pertumbuhan hutan untuk kayu, karbon dan nilai-nilai lain.

Improvement in Understanding

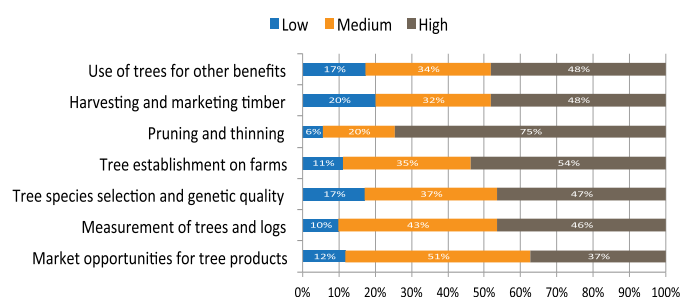


Fig. 1. Improvement in participants' knowledge and understanding of different aspects of CBCF [Gb. 1. Peningkatan pengetahuan dan pemahaman peserta terhadap berbagai aspek CBCF]



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4. Day 4: Management
 - a. Tree and forest growth, silvicultural options (pruning, thinning etc).
 - b. Examples of farmers applying silvicultural methods.
5. Day 5: Farm visits, graduation and the future
 - a. Appropriate design, risk assessment, evaluation of options, etc.
 - b. Presentation of certificates.
 - c. Role of farmer groups and information networks.

Written evaluations show that participants felt that the course had greatly improved their understanding of many aspects of CBCF, particularly their knowledge of tree pruning and thinning for improved wood quality. This interest in silviculture was clearly driven by an improved understanding of the markets quality specifications and the relative value of large diameter, well-pruned sawlogs. Over sixty per cent of the participants specifically noted that they would apply the knowledge they had gained on their own land and more than thirty per cent said that they would share their knowledge with other farmers.

There was a strong view amongst the research team involved in the project that the Master TreeGrower model represented a very different approach to that generally adopted by forestry extension agents in Indonesia. In particular, they saw the early focus on market specifications and prices and the act of sharing some of the measurement techniques and silvicultural science that had largely been the preserve of the forestry profession as being the very novel.

Recommendations:

1. Establishment of an Indonesian Master TreeGrower management committee or association (I-MTG) involving representation from both government and NGO organisations within Indonesia plus a representative from the Australian Agroforestry Foundation.
2. Development of an operational work plan and budgeting strategies for the implementation of MTG activities in Indonesia including the training of regional MTG coordinators, delivery of MTG courses and provision of follow-up support for past Indonesian MTG participants.
3. Formulation of a policy brief on the need for scaling up the MTG training to improve the quality of smallholder timber plantations in Indonesia.
4. Maintenance of a research program that includes the monitoring and evaluation of any new MTG courses and the long-term impact on the MTG program on landholder and community behaviour.

4. Hari ke-4: Pengelolaan
 - a. Pertumbuhan pohon dan hutan, alternatif metode silvikultur (pemangkasan, penjarangan, dll).
 - b. Praktek penerapan metode silvikultur.
5. Hari ke-5: Kunjungan ke lahan, kelulusan, dan prospek ke depan
 - a. Perencanaan yang tepat, penilaian resiko, evaluasi pilihan, dll.
 - b. Penyerahan sertifikat.
 - c. Peran kelompok tani dan jaringan informasi.

Hasil evaluasi tertulis memperlihatkan peningkatan pemahaman para peserta atas berbagai aspek apabila hutan rakyat dikelola secara komersial, terutama dalam hal pemangkasan dan penjarangan untuk meningkatkan kualitas kayu. Ketertarikan tentang silvikultur ini muncul dari peningkatan pengetahuan petani bahwa harga kayu dipengaruhi oleh spesifikasi kualitas kayu yang dapat diterima oleh pasar. Lebih dari dua per tiga peserta menyatakan bahwa pengetahuan yang diterima selama pelatihan akan diterapkan di lahannya. Lebih dari sepertiga peserta juga menyatakan bahwa mereka akan menyebarkan pengetahuan kepada petani lain yang belum berkesempatan mengikuti pelatihan.

Khusus tentang model pelatihan Master TreeGrower, tim peneliti melihat bahwa model tersebut merupakan cara pendekatan baru dibandingkan dengan model pelatihan yang biasa dilaksanakan dalam berbagai penyuluhan kehutanan di Indonesia. Hal yang memperlihatkan kebaruan adalah materi pengetahuan mengenai harga dan spesifikasi kualitas kayu yang diterima pasar yang disampaikan di awal sebelum materi teknik pengukuran dan ilmu silvikultur. Materi-materi tersebut diharapkan dapat mendukung upaya peningkatan kesejahteraan petani hutan rakyat sehingga hutan dapat terus lestari.

Rekomendasi:

1. Pembentukan Master TreeGrower Indonesia yang melibatkan perwakilan pemerintah dan LSM serta Australian Agroforestry Foundation.
2. Penyusunan rencana kerja dan strategi pembiayaan untuk implementasi MTG di Indonesia termasuk pelatihan coordinator MTG regional, pelaksanaan pelatihan MTG, dan dukungan lanjutan bagi para peserta MTG Indonesia.
3. Penyusunan policy brief tentang pentingnya penyebaran pelatihan MTG dalam rangka peningkatan kualitas kayu hutan rakyat.
4. Menindaklanjuti kegiatan penelitian termasuk monitoring dan evaluasi pelatihan MTG dan dampak jangka panjang dari program MTG terhadap petani hutan rakyat dan masyarakat sekitar.



Fig. 3. Pruning a teak tree at MTG course in South Konawe
[Gb. 3. Praktek pemangkasan pohon jati dalam pelatihan MTG di Konawe Selatan]



Fig. 4. A participant in Bulukumba learnt how to use MTG tape
[Gb. 4. Peserta dari Bulukumba sedang mencoba penggunaan pita MTG]



Fig. 5. On farm presentation and discussion on thinning trees at Sumbawa MTG course
[Gb. 5. Penyampaian materi dan diskusi tentang penjarangan dalam pelatihan MTG di Sumbawa]



Fig. 6. Farmers teaching farmers about basal area and how to measure it using MTG tape at Pati
[Gb. 6. Petani mampu menyampaikan pada peserta lain tentang basal area dan cara pengukurannya menggunakan pita MTG dalam pelatihan di Pati]

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