The Master TreeGrower (MTG) initiative introduced through the Overcoming Constraints to Community-Based Commercial Forestry in Indonesia, an ACIAR Project No FST/2008/030, provides a new extension approach in Indonesia to promote smallholder learning. This evaluation report provides a critical analysis of this new and promising approach. The MTG course has helped to promote further changes, not only at the level of outputs, but up to the outcomes. Figure 1 illustrates these chains of changes due to MTG course and initiative.

Pendekatan pelatihan Master TreeGrower (MTG) – diperkenalkan melalui proyek kerjasama penelitian ACIAR FST/2008/030 'Overcoming constraints to community-based commercial forestry in Indonesia'–memberikan suatu pendekatan baru terhadap dunia penyuluhan di Indonesia. Laporan evaluasi ini menyajikan analisis kritis terhadap pendekatan baru ini. Pelatihan MTG dapat membantu mendorong perubahan lebih lanjut, tidak hanya di tingkat output namun hingga pencapaian outcome. Gambar berikut dapat memperjelas rantai perubahan yang terjadi dengan adanya pendekatan pelatihan MTG.
Strengths of the MTG course are organized as follow:

1. MTG course was developed, designed and implemented through a participatory process with the local partners and stakeholders. The participatory approach is not only critical to create a sense of belonging to the program and activities, but it is also important to respect farmers’ experiences, develop commitment and responsibility as part of empowering farmers or smallholders.

2. MTG course use market first approach. Farmers’ decisions on trees and farm management should be based on the market expectations, information, and demand (timber species, quality, price, and time). Visiting timber processing industries is also critical to develop smallholders’ understanding and attitudes toward trees and farm management practices. They can be convinced for the link between timber quality and the way they manage the trees and farms.

3. The MTG courses addressing participants’ lack of awareness and knowledge, unfavourable attitudes, perceptions, skills, aspirations and practices. MTG learning process is taking place in the class as well as in the farms and timber processing industries. Participants learned from resource persons, field observation and discussions, and doing real things such as pruning and thinning, and measurement. Combining classical presentations, field observation and doing real thing is an ideal approach to change peoples’ knowledge, attitudes, skills, aspiration and practice.

4. Effective selection of MTG course participants was a critical step in MTG course. This study found that the participants did share their knowledge and skills with other farmers in their respective groups, and even with other family and community members at their village. As results, these non-MTG participants changed their knowledge, attitudes, skills, aspiration and practices.

5. Conducting MTG course at the local, village and close to farmers’ places is another strength of the MTG. Farmers prefer to stay close to their place and farms as they do have farming activities such as feeding their animals such as goat and cattle. Adults learning principles gives a direction “Farmers learn well at their close to their place and farms as they do have farming activities”.

6. Working closely with local authority and government is another strengths of the MTG course. The local governments have not only provided strong supports to the project, but also adopted the MTG learning approach to help their smallholders and communities. This approach has helped in addressing issues of sustainability of the project impacts.


(4) Pemilihan peserta MTG merupakan hal penting. Salah satu temuan dari kajian ini adalah peserta pelahan benar-benar membagikan pengetahuan dan ketrampilan yang mereka dapatkan kepada petani lain dalam kelompok taninya dan juga kepada anggota keluarga dan tetangga sekitar. Hal tersebut mempengaruhi pula perubahan pengetahuan, sikap, ketrampilan, aspirasi dan praktek yang dilakukan petani yang bukan peserta pelahan MTG.

(5) Pelatihan yang dilaksanakan secara lokal di desa dan dekat dengan tempat tinggal petani menjadi keuanglan lain. Petani akan lebih nyaman berada di dekat tempat tinggal dan lahanannya karena mereka juga terlibat dengan kegiatan pertanian dan memberi makan ternak. Hal ini sesuai dengan salah satu prinsip pembelajaran bagi orang dewasa yakni “Petani belajar dengan baik di lokasi yang dirasakan nyaman olehnya”.

(6) Bekerja sama dengan pemerintah setempat juga menjadi kelebihan dari pelatihan MTG. Pemerintah setempat tidak hanya mendukung proyek yang dilakukan namun juga mengadopsi pendekatan MTG dalam program kerjanya sebagai salah satu cara membantu petani dan masyarakat. Pendekatan ini membantu menjawab isu keberlanjutan sebagai dampak dari pelaksanaan proyek.
Even though there are some strengths that support the effectiveness of the MTG course, there are also some critics or limitations such as the following:

**Di sampling keunggulan efektifitas pendekatan pelatihan MTG, terdapat beberapa kritik dan kelemahan yakni sebagai berikut:**

From this study, there are some suggestions for future MTG course as follow:

<table>
<thead>
<tr>
<th>Suggestion from this study</th>
<th>The MTG Future Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Keep the existing process or approach; do it in a more informal way.</td>
<td>Process and approach in delivering the topics such as visit to timber processing industry, field visit &amp; practices on the farms, short theoretical session and more discussion, participatory process during the sessions (discussion and reflection). These processes reflect the use of effective adult learning principles such as “seeing is believing and learning by doing – direct experiences”.</td>
</tr>
<tr>
<td>2. MTG participants should be selected properly, they should be young, energetic, have good leadership skills, from tree grower groups or informal leaders. They should have teak plantation, have potential to share with others.</td>
<td>Knowledge and skills gain from the MTG course would not only be used for them selves, but also shared with other farmers.</td>
</tr>
<tr>
<td>3. Keep the existing contents, but go in-depth; Add contents on teak pest and diseases addressing issues on “penyakit penggerebek batang” or locally called as “Olan-olan”; effective use of space under the trees for Non Timber Forest Products; include also topics on tree species – seeding; a subject on tree grower groups and associations; do more specific training need assessment.</td>
<td>The existing topics given in MTG course are “mastering the art of tree growing, markets, measurement, management, and farm visits, graduation and the future”. More time is needed to deliver the topics, especially the topic on measurement (refer to suggestion no. 4).</td>
</tr>
<tr>
<td>4. Repeat the subject on measurement (tree volume and height).</td>
<td>Allocate more time for this topic and think about the process effectiveness!</td>
</tr>
<tr>
<td>5. Have follow-up activities after the completion of the course.</td>
<td>Monitoring the changes and get participants feedback during the course or doing the course at the village level where the participants can come and return to their place at the same day and implementing the knowledge and skills straight away.</td>
</tr>
<tr>
<td>6. Establish “Demonstration Plot” or “Teaching Farms”.</td>
<td>Identify the successul or model farms and use these to show participants the best practices (help demonstration the results and the processes).</td>
</tr>
<tr>
<td>7. Provide supports in document such as modules or other reading materials.</td>
<td>Prepare documents as reading and supporting materials.</td>
</tr>
<tr>
<td>8. Working closely with local government, especially the forestry office.</td>
<td>Future MTG courses should be discussed with and involved local government (the Forestry Office).</td>
</tr>
</tbody>
</table>

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**General Conclusion**

The MTG approach to smallholders’ learning has been effective to promote smallholders’ knowledge, skills, attitudes, and aspiration improvement. The MTG courses have not only facilitated smallholders’ learning but also promoted smallholders’ change in farm management practices. Almost all MTG participants claimed for the implementation of the new pruning techniques learned through MTG courses. However, due to various reasons, some of these tree growers have only pruned a proportion of their trees. Various factors associated with these levels of pruning such as the farm size, the number of trees, the tree age, farmers’ physical condition, and the availability of cash and human labour. The MTG courses have not only allowed participants to learn from listening to the resource person presentations, but also from observing, and doing something they are learning. Visits to the timber processing industries allowed them to understand the market expectations – the timber species, the quality, the price, and the need to implement best tree management practices.

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**Kesimpulan umum**

Case Study: Changing in Smallholders' Livelihood in Pati District

One study within 'Enhancing CBCF' project aims to explore social, economy and cultural changes of smallholders comparing with conditions from a similar study from the previous project, 'Overcoming constraints to CBCF'. From the study in the previous project, four years ago, market for sengon from community forests in Pati District was newly developed. The farmers sold their first or second rotation of sengon in form of whole standing trees in a lot. All harvesting activities managed by the buyer. Logs from the farms then transported to processing industries in other districts (Semarang, Temanggung, Kebumen) even to other province (East Java). Nowadays we can find some wood processing industry in Pati, 6 unit of sawmills and 1 unit of veneer factory. Therefore a big portion of logs from Pati can be processed locally.

Our study location lies in a hilly area. A special condition here is in some area, land can be functioned as ricefield when the water flow is retained or can become a dryland if the water is allowed to flow downward. Recently, farmers set their land as dryland, expanding the area and number of planted trees (sengon) with mixed species (e.g. cassava, pepper, chili, jengkol, peanuts, banana, taro) used for home consumption and commercial sale.

Farmers in Giling village are able to fulfill home consumption from their farm and doing side jobs (e.g. as labor, bricklayer/carpenter, driver, food/grocery stall). Therefore, the money received from selling timber is not entirely used for consumption but can be put in saving account or buying livestock. Farmers in Payak dan Gunungsari are starting not to sell standing trees but in logs by doing the harvesting themselves (pay chainsaw rental, labor and truck). They can enjoy the advantageous added value from these activities. They are confident in selling logs since they have access to the market through working in sawmills or selling through truck driver who have access to sawmills.

Studi Kasus: Perubahan Penghidupan Petani Hutan Rakyat di Kabupaten Pati


Lahan di lokasi studi Pati umumnya berada di lereng bukit. Lahan dapat difungsikan sebagai sawah bila air ditampung dalam petak lahan atau dapat menjadi lahan kering bila air dibiarankan mengalir terus ke bawah. Saat ini petani memilih menjadikan lahan sebagai lahan kering agar dapat ditanami berbagai jenis tanaman yang pasarnya baik dan hargaannya tinggi. Tanaman utama yang dipilih adalah sengon karena harganya yang menarik dan dicampur dengan ketela pohon serta berbagai tanaman bawah tegakan lainnya (cabai, merica, pisang, kacang, talas).

Di Desa Giling, pada rata-rata petani saat ini juga memiliki pekerjaan sampingan sebagai tukang, buruh, sopir, usaha warung dan lain-lain. Kebutuhan konsumsi sehari-hari dipenuhi dari upah kerja sampingan tersebut sehingga sebagian besar hasil panen kayu sengon dapat dibatikkan di BRI atau dibeli oleh petani yang membeli kayu dengan cara menebang sendiri (membeli pohon dalam bentuk unhanded) atau menjual dengan cara yang diinginkan oleh pembeli.

The most interesting of the project regarding these women researchers is that the research focus on smallholder. Tuti Herawati (Tuti), works as seconded scientist at CIFOR, said that smallholder is the important actor in forest management in Indonesia. Therefore, social dimension analysis is needed to understand condition of the smallholders and its changing overtime, as stated by Asih. In addition, said Tri and Dewi Ratna Kurniasari – junior researcher from FOERDIA Bogor – focus on the smallholder also requires appropriate policy support as well as training to improve farmers’ capacity in managing their forests.

These women researchers share a same expectation for the next 5 years, that this research can deliver good outputs for many parties especially to improve capacity and welfare of the smallholders. In addition, the research is also expected to provide evidence-based and applicable policy recommendation on social forestry.

The research collaboration ‘Enhancing CBCF in Indonesia’ involves various institutions including government, university, research entities, NGO as well as a variety of team member background as researcher, scientist, practitioner and policy maker. This is conveyed by Aneka Prawes Suka (Aneka), the research team coordinator. The picture shows project leader, Digby Race, with some of women researchers involved. These women researchers have a common interest in interactions with communities around the forests, NGO, central & local government, industry, scientist and other researchers, national and international. The interactions are very important to formulate good research results as basic evidence for provide policy recommendation, as stated by Kristiana Tri Wahyudiati (Tri) – management & policy maker of FOERDIA. The research results also need to be shared in form of articles to enrich the scientific knowledge, as stated by Setiasih Irawanti (Asih) – senior researcher from FOERDIA Bogor.