1.1 Workshop Report: 'Application of genetic information for the verification of teak' Jogjakarta 5th May 2015.

To establish the political support and feasibility of verifying teak origin using DNA methods, a workshop was organsied to bring together project scientists, FORDA, SVLK and ministry staff and teak smallhodler and planation managers to discuss the issues. A group of 35 people attended a workshop on 'Application of genetic information for the verification of teak' held at the FORDA meeting rooms at Jogjakarta on 5th May 2015.

1.1.1 Background

In an effort to suppress illegal timber trade, the Ministry has implemented a Sistem Verifikasi Legalitas Kayu (Timber Legality Verification System) or SVLK, which serves to ensure wood products and their raw materials are obtained or derived from sources whose origin and management meet the legal requirements. Wood is certified as legal when the origin of the timber, logging licenses, systems and procedures for harvesting, transporting, processing, and trading or transfer of ownership can be demonstrated to comply with laws and regulations.

Genetic information can be used to verify the legality of timber by means of:

a) Determining the identity of the type of wood being traded (DNA barcoding);
b) Verifying the source or origin of wood, both at the regional level (phylogeography) or at the level of the concession (population genetics)
c) Track the source of logs or wood products (DNA fingerprinting)

This workshop aimed to gather information about the potential use of genetic information for the verification of the legality of teak. This workshop discussed the technical aspects required to facilitate the development of DNA identity verification of the legality of teak.

1.1.2 Speakers

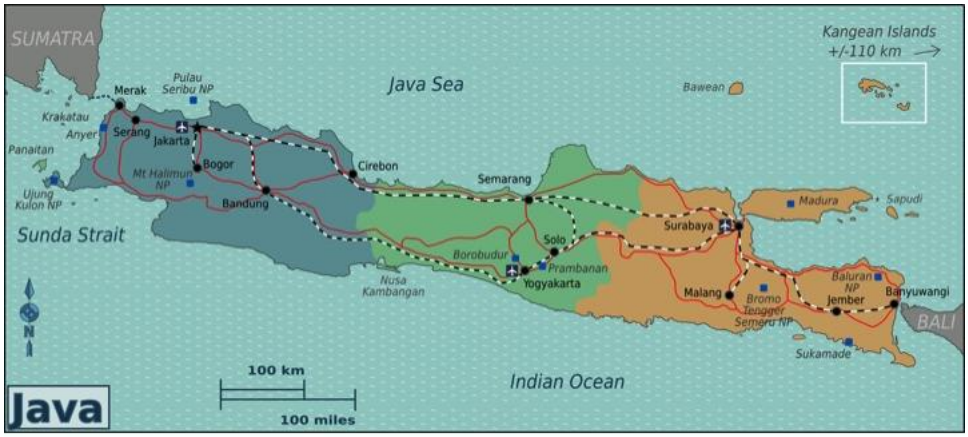
1. Dr. Bambang Sukmananto, Director of Processing and Marketing of Forest Products, SVLK
2. Prof. Andrew Lowe, University of Adelaide
3. Dr. Anto Rimbawanto, Research Institute of Forest Biotechnology and Plant Breeding

1.1.3 Attendees

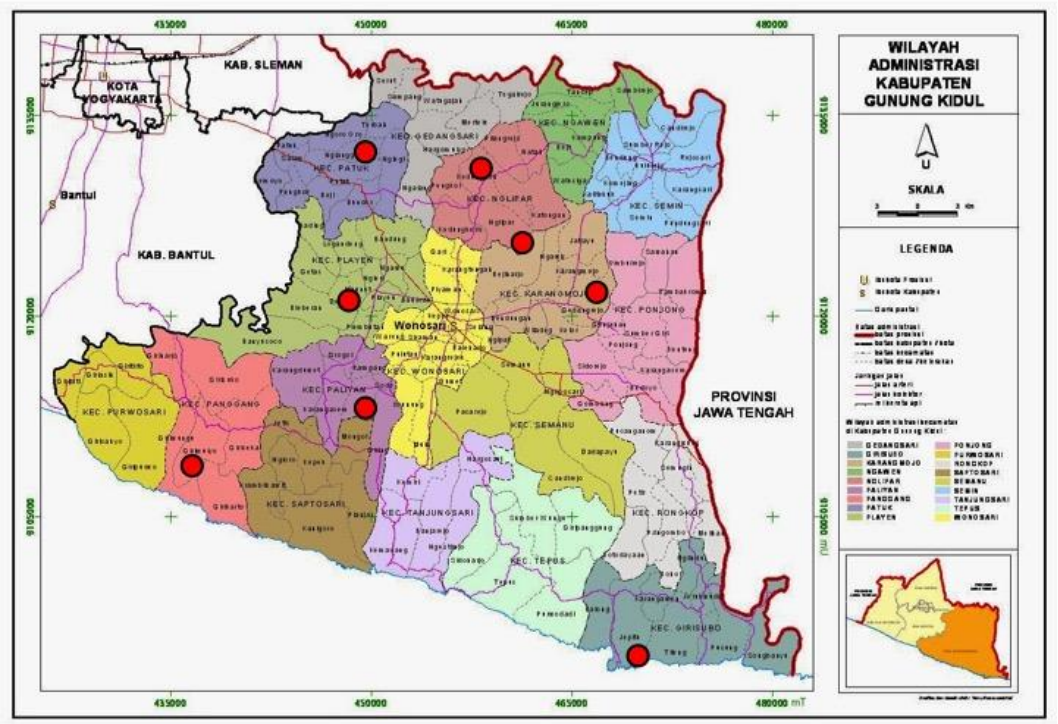
No.	Organization/Farmer Cooperative	Contact Persons
1	Kelompok Tani Kumpul Makaryo	Warsana and Wagiran
2	Kelompok Tani Sedyo Rukun I	Widarno and Susilo
3	Kelompok Tani Wukir Mulyo	Wasito and Subandi
4	Kelompok Tani Sumber Makmur	Budi Atmono and Marjono
5	KHTR Jati Pendowo	Sutari and Anang

6	PTHR Ngudi Lestari	Sukimin and Sugeng S
7	HTR Wono Martani-Koperasi Akur	Suripta and Handek
8	Kelompok Tani Margo Mulyo	Paija and Sutri Yanto
9.	Directorate of Marketing and Processing of Forest Product, SVLK	Dr. Bambang Sukmananto
10	Perhutani Research and Development Centre	Suwarno
11	District Forestry Service of Gunung Kidul	Bambang WS, Taufik, Benny, Sumardanto
12	CFBTI Management and Researcher	Dr Mahfudz, Purnamila Sulistyawati, Vivi Yuskianti, Dana Apriyanto, Istiana Prihatini, Hamdan, Sigit, Anton Widyatmoko, Anto Rimbawanto, Eva Sinaga, Liliana Baskorowati, Anis Fauzi, Nurdin
13	University of Adelaide, Australia	Prof Andrew Lowe
14	Double Helix Tracking Technologies	Bart van Assen

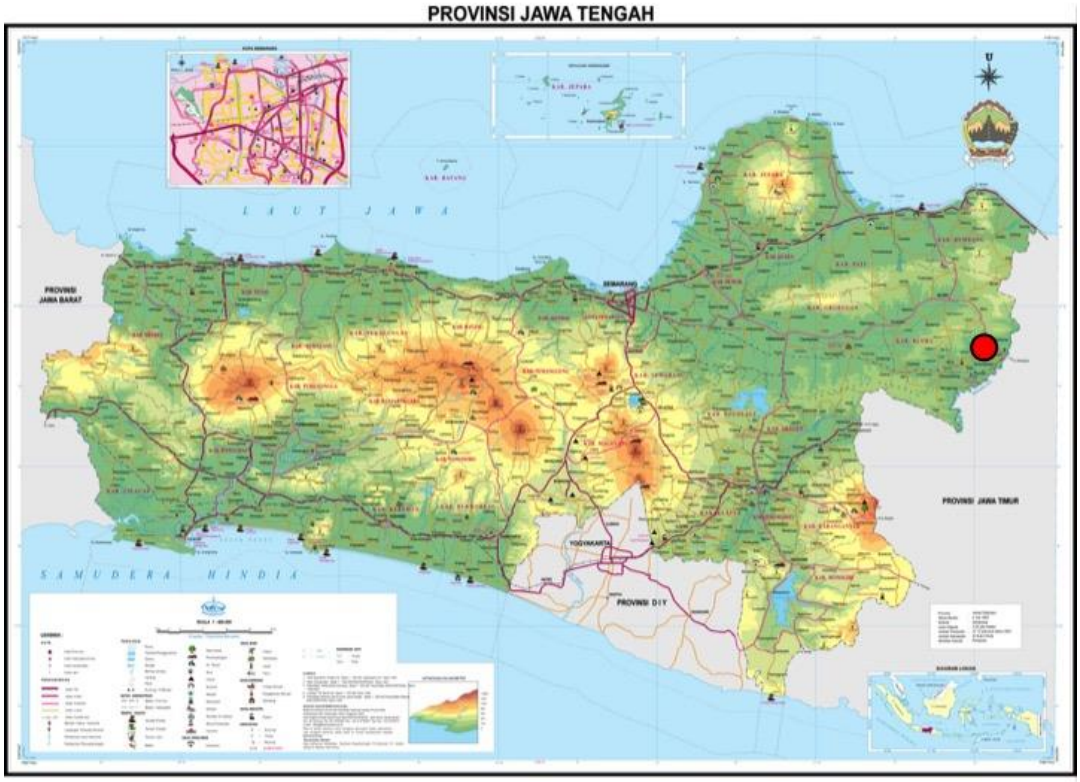
1.1.4 Location Maps



1. Overview of Java



2. Location of teak small holder plantations represented at meeting



3. Location of Perhutani R&D Centre – large scale teak plantation in Java

1.1.5 Workshop Photographs

1. Welcoming delegates

2. Dr Rimbawanto introduces meeting and opening given by Dr Mahfudz, CFBTI Director

3. Talks given by Director of SVLK, Dr. Bambang Sukmananto, and Prof Andrew Lowe

4. Question and answer session

5. Question and answer session continued

6. Talks given by Dr Rimbawanto and Mr Suwarno, Perhutani R&D Centre

7. Expert panel discussion with Bart van Assen, and questions

8. More questions and panel discussion with Bart van Assen and Dr Rimbawanto

9. Group photo at CFBTI – May 5th 2015

1.1.6 Outcomes of Group Discussions

1. Perhutani
    a. There are 7 Forest Management Units of Perhutani which have received FSC certificate. Having FSC certificate add around 10% to the cost. But this is compensated by the fact that most of the teak are exported to Europe, so they can get premium price.
    b. Another way to recoup the cost of certification is to increase their plantation productivity by using genetically improved materials (seeds/clones).
    c. Perhutani is getting the benefit of certification (FSC or SVLK) because they operate from plantation to industry.
2. Kelompok Tani Kumpul Makaryo (Farmer Group "Kumpul Makaryo").
    a. Practice mix planting of teak and cash crops, no monoculture of teak planting.
    b. Certification is something new for us, but we would be interested if it gives us benefit. Cost of certification is one of important issues to consider when small group such as farmer's cooperative has to make a decision on joining any certification scheme.
    c. We are interested to replace our teak stand with genetically improved seeds/seedlings, and would like to receive assistance in establishing demonstration plot.
3. District Forest Service of Gunung Kidul
    a. Community forest/smallholder plantation is very important for the district, currently there are about 43,000 ha of established plantation, majority is teak (up to 80%), potentially it can have 50,000 ha.
    b. Recognizing the importance of teak, the local government is keen to see that small holder teak plantations use improved teak seeds/seedlings.
    c. One important issue with certification, is how the DNA marker will be implemented in small holder teak plantation.
4. Koperasi Hutan Wana Manunggal
    a. Received sustainable forest management of PHBML or LEI (Lembaga Ecolabelling Indonesia), managing about 815 ha. The problem they had was selling the timber to overseas market, as they did not have access. In the process they form an agreement with a furniture industry who agreed to get timber from the cooperative, but this only went on for 2 years. In the end, because of lack of funding to maintain the certificate, the certificate was revoked. In summary, having certification was a burden for the cooperative.
5. Farmers Group Petani Jati Pendowo Nglipar
    a. Received FSC certificate since 2012/2013. Experiencing a booming sale where they fetched a price of up to Rp. 3 million of teak per m^3, a significant jump from Rp. 200,000 they normally received. However, since the crisis in Yunani, the demand has significantly dropped. Become much more aware of the price of teak timber, and they can have a better say with the buyer on deciding the price.
    b. One of the positive points of having certificate, is farmers become much aware of the price of teak timber, and they can have a better say with the buyer on deciding the price. Farmers also adopting better recording system since plantation to harvesting.