



GTTN

Global Timber  
Tracking Network

# A report from the GTTN Regional Workshop in Africa

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### Dissemination level

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## 1 Introduction

To increase awareness amongst African stakeholders from the field of research, government and non-governmental institutions, development partners, and the private sector about the Global Timber Tracking Network (GTTN), and the growing potential of timber tracking techniques to help curb illegal logging in Africa, GTTN organized its [Regional Workshop for Africa in Yaoundé, Cameroon](#) on 27-28 June 2018 in collaboration with Bioversity International.



The aim of the workshop was not only to increase awareness of stakeholders in Africa about GTTN but also to identify interest, potential demands and prospective barriers for adoption of timber tracking technologies in the continent. In collaboration with African stakeholders, GTTN wanted to explore the needs for capacity building and knowledge transfer for developing skills, knowledge and tools and with the aim to increase adoption of timber tracking in the continent. Africa is hardly presented on GTTN's [map of service providers](#). Since GTTN is currently finalizing a Service Providers Directory, the workshop also served to map existing capacities and know-how with laboratories already involved with timber tracking as well as with laboratories that currently apply their competencies to other areas (e.g. agriculture, CITES species other than wood etc.). Further important topics were handling and

sharing of intellectual property rights (IPR) as well as issues relating to Access and Benefits Sharing (ABS). Finally, the workshop aimed at identifying interest for the development of strategic partnerships (with private sector, key institutions and decision makers) within African countries in the application of the timber tracking technologies and thereby exploring avenues for collaboration and up-scaling the GTTN initiative between demand and supply side countries for effective wood traceability systems.



Hauke Brankamp from the German Embassy in Cameroon opened the meeting by stressing the importance of an active network in the timber producing countries. His call was enthusiastically answered by the ca. 25 participants coming from across the continent, and bringing experiences from within research institutes, local authorities, policy, NGO's, as well as private companies.

After an introduction to GTTN's concept and activities (Jo Van Brusselen, GTTN Project Coordinator), and some insights to the role African stakeholders play within the network (Gesche Schifferdecker, GTTN Communications Manager), Marius Ekué (Bioversity representative in Cameroon and GTTN Steering Committee member) discussed local capacities and made quite clear that an investment in capacity building and technology transfer (especially to the Congo Basin countries) are needed. An adoption of timber tracking

technologies requires the development of skills, knowledge and tools, but also the possibility to apply the tools directly in producing countries.

## 2 Introducing timber identification methods

Following Marius' engaging speech, four different methods of wood identification were presented. Harisoa Ravaomanalina (Scientific Authority of CITES Madagascar) introduced wood anatomy as an identification tool for the most commercialized Malagasy woody species. She also elaborated on the challenges of data collection, because the *Dalbergia* species she is working on are threatened to become extinct and samples are rare. Harisoa's presentation was followed by an introduction to wood DNA analysis by Marius Ekué, who addressed the advantages of this method when it comes to the identification species and the geographic origin, but also stressed the importance appropriate samplings and the development of reference databases. Micha Horacek (Francisco Josephinum Secondary College and Research Institute in Austria) shared insights of his works with stable isotopes. He explained that when a tree grows and takes up water, nutrients and carbon dioxide, these stable isotope ratios are passed on to the wood, imprinting it with geographical markers that can be used to identify the wood's origin. However, isotope ratio analysis cannot be used for species identification. Finally, Cady Lancaster (US Forest Service & National Fish and Wildlife Forensic Lab) shared her video contribution to discuss the advantages and limitations of DART TOF Mass Spectrometry, which analyses the chemical composition of wood for species identification. (If you want to learn more about the advantages and limitations of the different timber identification methods, check out our section on the GTTN website [here](#)).



### 3 Demands and barriers for timber tracking in Africa

The third session was dedicated to identify interests, demands and barriers for timber tracking in Africa. The first speaker, Richard Gyimah (Ghana Forestry Commission) elaborated on the potential of wood identification techniques application in Ghana. Richard stated that as a VPA country, Ghana has a timber legality assurance system (TLAS) – and even if the innovative tools are not used yet, he supported their future application and stressed the need to bring policy makers on board. Concentrating on the scientific capacities in West Africa, Emmanuel Opuni-Frimpong from the University of Energy and Natural Resources in Ghana shared his experiences with the development of a centre of competence for wood identification in Ghana. His presentation was followed by that of Eric Essomba (Environmental Investigation Agency - EIA) exploring the potential of wood identification techniques in EIA's investigation in the Congo Basin. EIA is currently building capacity of local civil society organisation to collect Okoume's samples in the region. Germain Yene Yene (Gersyn Services) discussed about his challenges of organizing various sampling campaigns mostly in Central Africa.

Even though all speakers work in different environments and countries, they all stressed the importance of increasing regional discussion and cooperation also with local governments to strengthen regional capacities and cooperation

amongst African countries to detect and prevent illegal timber trade in the region.

#### 4 Frameworks for cooperation in Africa

The final session of the day had a very practical approach aiming at the development of frameworks for cooperation in and with Africa. The session started with a presentation of Yves Nkoum Messoua from the National Support Agency for Forest Development (ANAFOR) in Cameroon. Mr. Nkoum Messoua shared ANAFOR's experience with CITES, wood identification and the protection of Cameroonian forests with a specific focus on the genetic traceability of Assamela (*Pericopsis elata*) in Cameroon. Illegal logging and habitat loss pose a realistic threat to Assamela, which is among the most valued tropical hardwood timber species. Following decades of extraction in the 20<sup>th</sup> and 21<sup>st</sup> centuries, the species was listed on CITES Appendix II. Since it is not only found in Cameroon but also in neighbouring countries like Republic of the Congo, DRC, Ghana and Nigeria, collaboration is crucial. Yves' presentation was spontaneously followed by the one of David Odee (Kenya Forest Research Institute – KEFRI) who offered insights to East African cooperation initiatives and international projects on tropical tree species that KEFRI have conducted. The last presentation of the day was done by Pacyinz Lyfoung (Public Interest Intellectual Property Advisors - PIIPA). She addressed the issue of handling and sharing of intellectual property rights, concerning technology, methodology and reference data. Thereby she also introduced questions relating to Access and Benefits Sharing (with reference to the Nagoya Protocol).





The presentations were followed by a panel discussion with several speakers of the day and active engagement of the workshops' participants. After a follow-up on Pacyinz's speech and controversial debates between scientists and policy makers (who had different approaches to the topics), the group discussed whether African timber producers focus more on working on timber species used in the domestic, intra-African or on international markets. Interestingly, contributions suggested that all are important, depending both on wood species and producer countries. The panellists also identified key stakeholders in the region to further promote and develop GTTN and potential focal points. Finally, the participants decided to continue the exchanges during the World Café planned on the following day.

## 5 Mapping challenges and opportunities

The morning of the second day aimed at discussing four different questions in four consecutive and rotating sessions. The table facilitated by Marius Ekué targeted at developing strategic partnerships (with the private sector, key institutions and decision makers) within African countries in the application of the timber tracking technologies. Nele Schmitz (Thünen Institute) identified what capacities for wood identification tools are currently present in Africa (direct or hidden, i.e. methods not used on wood yet) and what capacities still need to be developed. Pacyinz Lyfoung proceeded the engaging discussion of

the former day and worked with her group on solutions for local protection in the framework of global cooperation with a specific focus on IPR and ABS. The fourth table was moderated by Jo Van Brusselen who further developed GTTN's approach of timber species prioritization for reference data development.



The meeting was closed by a visit to the local sawmill Dino & Fils SA, thoroughly guided by the managers Daniel Abomo and Njidam Moussa. From logging to various processing phases, the company provides clients domestically and globally with intermediate to final products. It was demonstrated that the company takes high regard of production and environmental standards. During the visit the participants of the Regional Workshop learned of Dino & Fils' processes and chain-of custody and how they operate vis-a-vis due diligence requirements of domestic and international markets.

### 5.1 Topic A. Developing a pathway towards strengthening regional cooperation

We have discussed efficient and effective ways to increase intra African collaboration in wood tracking technologies and to make the use of such

technologies a routine in the continent. First, participants have listed different African institutions (national forest research institute, university, international research institute, government agency, botanical garden etc.) dealing with wood identification issues or that could be involved in the future. It is important to notice that the GTTN secretariat (during phase 1 and phase 2?) have already reach out to most of the institutions mentioned by the participants. After that, the group identified three main ways to strengthen intra African regional cooperation in order to increase the use of timber tracking technologies in the continent namely: 1) capacity building; 2) transfer of timber tracking technologies and 3) networking among African partners.

All participants agreed that **capacity building** is essential and could be done by providing regular and practical field trainings on wood identification (at least with wood anatomy techniques) to different stakeholders involved in timber legality verification. There is also the urgent need to elaborate and to make available practical timber identification manuals and guides on African timber species traded. And finally, we can also work with academic institutions and international research centre (like Bioersivity International) based in African to develop curricula on timber tracking technologies and integrate them into forest degree programmes available in different countries in sub-Saharan Africa.

The **transfer of timber tracking technologies** can be done in different ways. *Field tools* such as the machine vision system for automated field–level wood identification or and the mobile wood identification app (My-Wood ID) can be developed for African timber and be deployed for use in the continent easily. *Reference labs* should be set up where it is non-existent now (especially in Central Africa inhabiting the second largest tropical rainforest in the World –

Congo Basin Forest). We should also promote more collaboration between existing labs in different regions (West, Central, Eastern and Southern) of the continent working of different species.

Finally, **networking** among African scientists and stakeholders interested by timber identification should also be promoted. This can be done through the creation of an African node within GTTN that Bioversity International was identified and is ready to lead. Such sub-network can bring together interested partners to work on the capacity building and technology transfer activities described above, but also developed specific communication products with the GTTN secretariat and also initiative some collaborative research projects on lesser known timber species and species traded mostly in the continent.

## 5.2 Topic B. Current wood identification capacities

During this break-out session it was discussed which capacities for wood identification are already present in Africa (direct or hidden, i.e. methods not used on wood yet) and what capacities need to be developed.

The wood anatomy lab in Madagascar has much experience with tree species identification but has so far no counterpart on the continent to share its experience with. It was widely agreed that the focus should be on what is going on already and start building from there. Therefore, it was decided to develop a list of the scientific, technical and human capacities that are linked to ongoing activities and that can hence impact directly. However, the list will also contain the potential capacities. These are the organisations with experience in field sampling, species or origin identification of biological material either than wood. Developing this list will also reveal the organisations that can play a role in raising awareness. The list can then be

used by researchers to search for collaborators but also by strategic partners (forest administrations, police, customs) when looking for information or training.

The aim of the list is to work towards a GTTN-Africa where all potential stakeholders are aware of each other's capacities (staff and resources) and can work together towards common goals. This will allow collaborations and organisation of trainings to support each other within Africa. It was emphasized that when African researchers are send abroad for training it is important to select personnel who will return and are interested in subsequently training others.

To identify the needs for specific capacities it was discussed if a focus on the African and/or international timber market is needed. All tree species that are in high demand on the African market are also in demand on the global market. However, in addition there are highly used non-commercial timber species that should be as well focused on as they are important for plantations, reforestation and conservation.

If you wish to contribute to the list of the African capacity and were not present during the workshop you can contact Nele Schmitz: [nele.schmitz@thuenen.de](mailto:nele.schmitz@thuenen.de)

### 5.3 Topic C. Local protection and global cooperation: IPR and ABS

Partners from the Africa region are looking for pathways for regional collaboration. They would like to clarify what collaboration is needed and define the objectives for the collaboration. They are very interested in capacity

building and technology transfer. To those ends, in summary, there are two main points that seek to enable practical and concrete action:

First. IP tools can help facilitate collaboration within the Africa region and between non-African and African partners.

Second. Some fair system of benefit sharing should be established throughout the whole wood commerce and related wood legality verification space, to build a sustainable mechanism for Africa that deals with all long-term aspects of protecting precious wood, integrating wood legality in countries' government budgets and functions, and helping countries' economic development. Areas where IP tools could assist establishing such fair and sustainable system:

- government: require government wood procurement to use legal wood and do wood legality verification, include wood ID and legality verification in governments' permanent budgets
- academia: establish labs that will have public and commercial activities that can generate revenues for long term sustainability; develop Masters and PhDs programs that will attract young people to this field and keep them in-country; when scientists get trained abroad as part of benefit sharing, they must share their knowledge with others in their countries
- wood ID and legality field: public funding agreements [of tree species sampling and reference data development projects] should include terms that will address all aspects of IP and provide for benefit sharing that will have long-term impact and benefit locals, such as by storing samples within the region, preferably by developing reference data in the country or region of origin, also by investing in expertise and technology; networks

should address fairness to origin countries and local partners in ownership, access, professional recognition, and commercial benefit sharing when appropriate.

#### 5.4 Topic D. Timber species prioritization for reference data development

GTTN is in the process of updating a tree species priority list. The list informs research and reference data (such as wood species genetic DNA) collection for the identification of tree species and their geographic origin by indicating a priority level (low-medium-high) for individual tree species. The priority level signifies the relative importance with which reference data should be created. A first version was published as an output of GTTN phase 1 in 2013. A draft update was compiled on the basis of the GTTN phase 1 output and on the basis of the updates in the CITES annexes. In June 2018, the questionnaire was shared with GTTN members and also with the participants of the GTTN Africa workshop in Yaoundé (27-28 June).

The questionnaire presents scientific species name, pilot/trading name, CITES annex listing, GTTN priority anno 2013, and it collects priority level updates (status and clarification), with geographic reference if applicable.

As the questionnaire had been just sent out prior to the regional workshop, and no preliminary results could be discussed, it was deemed more useful to discuss about the criteria of regional importance for species priority setting, rather than discussing about individual species prioritization.

The following issues were identified by participants as most important:

- Species protection: national and international protection agreements, CITES, IUCN red list; with special reference to a) look-alike species that are difficult to distinguish, and b) capability to differentiate wild from plantation specimens. Added difficulty is that it can occur that species traded under one common (commercial) name, however have a different protection status.

- Forest exploitation pressure: general status of adherence to law and good exploitation practice, with links to sustainable yields in context of highly commercialized non-protected species
- Commercial importance, domestic and international markets having about the same requirements, with the comments that a) most wood will be consumed domestically (reference value give of 70%) and b) some species may be traded only regionally. For effective protection, it therefore remains important to observe what is happening on domestic markets.
- Promotion species: the most important of the lesser known species are those with good wood properties that are finding their way onto the market
- some species may have specific cultural appreciation, which can create hugely different market valuation, which in turn may cause cross-border smuggling.
- Timber identification can be a real challenge when customs come across containers with very heterogeneous mixes of logs that can be of any species. It was stated by several participants that this has become a bigger issue over the past decade.



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[www.globaltimbertrackingnetwork.org](http://www.globaltimbertrackingnetwork.org)

The objective of the Global Timber Tracking Network (GTTN) is to promote the operationalization of innovative tools for wood identification and origin determination, to assist the fight against illegal logging and related trade around the globe. GTTN is an open alliance that cooperates along a joint vision and the network activities are financed through an open multi-donor approach. GTTN phase 2 coordination (2017-2019) is financed by the German Federal Ministry of Food and Agriculture (BMEL).