Forestry sector background document: Summary report of the ABDC-10 parallel session[1]

In this session, the background document was presented by Oudara Souvannavong. Two discussants (Jeff McNeely from the International Union for Conservation of Nature and Milton Kanashiro from the Brazilian Agricultural Research Corporation [EMBRAPA]) then gave their reflections on the document. Subsequently the floor was opened to the whole group for further discussion. The session was facilitated by Sandra Sharry, and the Rapporteur was Claire Williams.

In considering the general topic of applying biotechnologies to forestry, an important point made in discussions was that national tradeoffs in forest cover must be recognized, requiring tradeoffs especially for those countries which are conserving their own forest cover while using forest resources of other countries. One of these tradeoffs is the potential of introducing exotic forest species which may become invasive. Some forest ecosystems are fragile while others are resilient, meaning that they can recover rapidly from disturbance or catastrophe.

In the session, there was general support for the Priorities for Action for the international community outlined in Section 8 of the background document. Two Priorities for Actions were highlighted in particular in the discussions – Capacity building and North-South collaboration.

1. Build capacity for understanding forest biotechnologies at all levels. The field of forest biotechnology and all its research needs are not the same as for agriculture, so capacity needs are different.

The group added a valuable suggestion here:

- Identifying a policy gap in forest genomics research. The group identified a large policy gap in the tropical humid forest sector, which are naturally regenerated: there is the need to pair taxonomy with genus-level molecular identification. Implementing a range of policy measures such as forest certification, logging concessions, payment for avoided deforestation (Reducing Emissions from Deforestation and Forest Degradation, REDD), would mean that reliable means would be available to identify tree species, or at least to identify the correct genus, using both living tissue and wood. However, currently this is not the case. As an example, it was mentioned in the session that in a 100 hectare Amazonian logging plot, there were 124 individuals identified under the common name of "tauari", yet after careful identification, it was shown that these individuals are from two different genera and five different species. Current taxonomy tools are just not good enough. Therefore, there is a need to put together several approaches/methodologies as well as have parataxonomists with strong training and skills at local community level. Short-term grants do not fill the need. Remedying this gap requires medium- to long-term sustained funding for a transdisciplinary team to work towards this knowledge and the right tools. In short, policy-makers as well as the forest genomics community need to re-think the emphasis on within-species molecular tools in favour of among-taxon tools and work with field botanists. This gap between available research and global forest policy implementation must be remedied as soon as possible.

2. Support North-South collaboration especially given that genomics in forest biotechnology is advancing faster than expected. Similarly, the group was enthusiastic about regional centres of excellence. These centres would bring into play South-South collaboration. This model is well-suited to moving forest technology know-how into practice.

[1] This is the summary report of the parallel session organized by FAO on the forestry sector background document (ABDC-10/4.1, synthesized in ABDC-10/4.2) held on the first day of the FAO international technical conference on Agricultural Biotechnologies in Developing Countries (ABDC-10) that took place in Guadalajara, Mexico on 1-4 March 2010 (http://www.fao.org/biotech/abdc/parallel/en).