

3. Synopsis of Workshop Sessions

3.1. Opening Session

Dr. Junghwan Park, Director, Research Cooperation Division in the KFRI, opened and chaired the opening session of the Workshop.

Mr. Jose Antonio Prado, Director, Forest Assessment, Management and Conservation Division, FAO, welcomed all participants and reminded them that forests are today in the very center of the international discussion on climate change. He stressed that countries participating in COP 15 of the UN Convention on Climate Change in Copenhagen recognized the crucial role of forests in addressing climate change and made a decision on methodological guidance for REDD+ making a call not only to identify the main causes of deforestation and forest degradation, but also to establish national monitoring systems. He introduced UN-REDD program to support countries in their preparations for the mechanisms that are being discussed under the UNFCCC. Finally, he mentioned that in this context, FAO is also strengthening and modernizing its traditional National Forest Monitoring and Assessment program to respond the IPCC requirements for REDD+.

Mr. Snail Lee, Deputy Minister, Korea Forest Service, expressed his sincere appreciation to all distinguished participants for attending the meeting. He highlighted that “forest sector stands nearly 18% out of the global greenhouse emissions according to the IPCC 4TH report and this trend tells us that which direction the forest sector is to set up and enforce the policy implication for stabilization of climate system.” He also introduced that Mr. Ban, Gig-Moon, the UN secretary emphasized the climate change is impossible to be coped without the global forest conservation at the inaugural meeting of UN REDD Program in September 2008. Finally, he hoped that we would come to conclusion in drawing the basic set-out plan for the forest sector in the Asia Pacific region where deforestation and forest degradation is severe in order to practically perform the leading role that coped with climate change of the earth through the workshop.

Prof. Donkoo Lee, President of IUFRO, warmly welcomed everyone to the workshop and stressed that we must evaluate the ongoing effects and implications of climate change on forests and tailor our research, policies. and practices accordingly in order to plan for and manage healthy and productive forests. He also mentioned that in relation with this, National Forest Inventory System is one of the strategies that will provide relevant information for creating and implementing national policy associated to climate change, and through this, we can determine the level of capacity building that needs to be improved in one country. Finally, he hoped that this workshop would serve as a successful venue for the active for the active exchange of scientific and technical information among counties in the region and would help seek for better partnerships and collaboration.

Mr. Hyungkwang Kim, Senior Forestry Officer, Forest Assessment, Management and Conservation Division, FAO, introduced the objectives and tentative program of the workshop as well as the administrative arrangements for all participants. He also presented invited experts, and the representatives from JICA, ITTO and partner countries to all participants. Finally, he encouraged all attendants’ active participation during the whole workshop period.

3.2. Session 1 : Climate Change and REDD

Climate Change and REDD+

Mr. Jose Antonio Prado presented “Overview of the REDD+”. He stressed that the IPCC estimated that more than 17.4 % of greenhouse gas emissions come from the forestry sector, mainly from deforestation and forest degradation. The emissions from DD are higher than those from Agriculture and Transport. Keeping forests intact and well managed is considered a rapid and cost effective way to reduce emissions. He also introduced that REDD(+) is proposed as an instrument under UNFCCC to provide financial incentives to developing countries to reduce greenhouse gas emissions from forests and increase greenhouse gas removals from the atmosphere through reduction of deforestation and forest degradation (REDD), and conservation, sustainable management of forests and enhancement of forest carbon stocks that correspond to the “plus” component. He briefed background of REDD+, outcomes of COP15 and significant issues to notes.

Climate Change Policy of Korean Government

Mr. Seoungjoo Shin, briefed the Green Growth policy of Korean Government (Creating Opportunities through Green Growth). He introduced the task of Presidential Committee on Green Growth; the importance of green growth policy in Korean government (Green Growth, Turning Crises into Opportunities); real actions of those policies (Legal framework, Green budget, 5-year national green growth strategic plan); and National Strategy for Geen Growth (Low carbon society, Climate change adaptation actions, Fostering green industries and green forest policy). He also mentioned recent progress in Korea (Setting National Mid-term Reductions Goal by 2020 – Cutting GHG Emissions by 30%, Launch of East Asia Climate Partnership program). Finally, he concluded Challenges ahead (Public and corporate support, Emission trading & carbon tax).

UN-REDD Program

Mr. Jose Antonio Prado mentioned the UN Collaborative Program on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD) was established in 2008 by FAO, UNDP and UNEP within the framework of ONE-UN in response to the Bali Action Plan 2007. He presented the Objective of this program; the Key Principles (coordinate response, contribution to UNFCCC process, country-driven REDD programs, and MRV- Measurement, Reporting & Verification); and Funding & Governance (MDTF: \$75m, Donors: Norway, Spain, Denmark), Policy board: 3 times a year, approve resources allocation). He also introduced two levels support of this program: first, international level (develop concepts & methodologies in MRV, build consensus about the importance of REDD in post 2012 agreement): second, national level (Provide technical support to develop the National Joint Programme and the national MRV system). He briefed REDD monitoring, principles for MRV work and REDD+ in a UNFCCC/IPCC context. Finally, he concluded the UN-REDD quick start countries.

Climate Change Policy of Korea Forest Service

Mr. Youngkyoon Yoon introduced the strategies of Korea Forest Service to address Climate Change. He mentioned an outline of Korean Forest and Forest Policy Implementation (1st-4th National Forests Plan). He also introduced the Climate Change Response in the Forest Sector followed by a comprehensive plan for combating climate change of South Korean Government on a voluntary basis (G7 Strategies in forest sector: Green up, cycle, trading, care, governance, inventory, partnership).

Discussion

- Forests are major carbon sinks and REDD+ is a proposed instrument to provide financial incentives to developing countries to reduce carbon emissions from deforestation and degradation of forests (D&D)
- Multipurpose NFIs are needed for integrated and comprehensive national policy processes
- Monitoring of forestry resources in a MRV system should be based on Multi-source NFI using both remote sensing techniques and field based data collection (measurements, observations and interviews with users of forestry resources)
- REDD incentives require MRV systems to derive verifiable evidence for carbon accounting and in order to formulate policies to achieve REDD. MRV systems must also address the underlying drivers of D&D
- FAO is responsible for MRV (NFIs) within the UN-REDD programme
- Different country situations will require different actions for REDD, and these need to be identified as soon as possible in order not to lose momentum, as there now are many potential funding options and opportunities for NFIs to be expected (COP15). REDD readiness is necessary to be able to absorb the financial openings, as funding might be response driven
- The REDD process is comprising of multiple stakeholders and is attracting many actors, why coordination of efforts along with a participatory process is central, as is transparency during the whole process. It is important to collaborate and create partnerships to share knowledge and to build on existing experiences
- REDD is a complex process and a stepwise implementation is recommended
- An IPCC guideline is to be followed for GHG reporting. However, Ref. levels and parameter inclusion for MRV are still not defined
- The REDD instrument is likely to include SFM and conservation along with decreased D&D
- A low carbon society should be based on “green” growth using both Regulations and Incentives as policy tools (Korean initiative)



3.3. Session 2-1 : National Forest Inventory Program in connection with climate change

Why is NFI important to mitigate climate change?

Mr. Claude Vidal briefed the use of French NFI data to simulate the impacts of climate change on French forest productivity, to develop models for potential area distribution of French tree species, and to study the long-term changes of French forest vegetation. He specifically explained the conclusions of long-term simulation of forest potential production (intensive management scenario and the most fertile sites are the most sensitive to climate change, positive response to the climate change, broadleaves take more advantage of climate change than conifers).

FAO NFMA program and approach

- Evolution of FAO NFMA

Mr. Dan Altrell introduced the FAO NFMA Objective (Strengthen national capacities for long term forest monitoring and assessment), Main consideration (Connect NFI to National Policy Processes), Working areas (Development of cost effective and pragmatic NFMA methods and tools, Technical support to countries' NFI), NFMA Evolution Process, and the present state of NFMA / ILUA Country projects.

FAO NFMA program and approach

- FAO - Finnish program and support in the Asia countries

Mr. Mikko Leppanen presented the FAO-Finnish program (Innovation in FAO NFMA- support to Asian countries). He mentioned the background (4 year program for FAO HQ and 5 pilot countries through innovative methods, tools and technology), resources (US\$ 20million), methodological development (REDD MRV, NFMA, National Forest Information Systems), and support to NAFORMA. He also introduced the sampling design for NAFORMA in Tanzania.

FAO NFMA program and approach

- Methodology and Cost Analysis of FAO NFMA

Ms. Anne Branthomme outlined the FAO NFMA Methodology and Cost analysis. First, she mentioned technical and methodological developing activities (core guiding principles, an evolving process to meet changing needs toward broader and more integrated concept, methodological overview- field survey and remote sensing, production of guidelines and training materials, production of databases and web-based dissemination, ILUA). Second, she also explained the analysis of NFMA cost and time (NFMA actual or estimated budget /country, breakdown of costs per selected activity, breakdown of time per activity).

Discussion

- Feasible timeframe of Tanzania project concerned about complex nature of REDD+ and limited budgets were discussed. (4~5 years)
- Estimating belowground biomass requires more research to develop appropriate models in view of diverse tree species.
- The role of Lidar technologies for multi-resource inventory would be a useful as an additional tool, though it would cost high. Its methods will need to be tested for statistically reliable data.

- The analyzed unit cost of NFMA projects included all survey components from planning to reporting, though its amount varies among countries. Most of the costs occurred during access and preparations in the field.
- Given the cost USD 5 million for one country, inventory cost is too high. (marginal)
- It was suggested that website data could be helpful for further information and e-consultation would be useful on creating information.
- It was mentioned that FAO publications were available at its website, including data and studies on NFI and climate change.

3.4. Session 2-2 : National Forest Inventory program in connection with climate change

Long history - USA NFI program

Mr. John Coulston briefed the United States NFI Program. First, he introduced the Overview of the US Forest Service Forest Inventory and Analysis (FIA) program (Basic sampling scheme, Variables collected, Use of remotely sensed data, Forest survey design tools). He explained a history of FIA since 1928 (9 National Assessment of Forests; 1953, 1963, 1970, 1977, 1987, 1992, 1997, 2002, 2007) Second, he mentioned an Use of Forest Inventory and Analysis data for planning and policy (US Greenhouse Gas Inventory, Forecasting).

Strengthening MAR : FAO - Japan program

Pacific Mr. Masahiro Otsuka introduced an Outcomes and perspectives of the MAR-SFM Project. He briefed project outline (Period: May 2006 – December 2010, Funded by Government of Japan, Asia- region, Objective: support harmonized forest monitoring, assessment and reporting (MAR), Global activities: guidelines/frameworks, National activities: networks, consultations, training, pilot testing), activities (regional, subregional, national), products of 2009. Finally, he explained Considerations/Lessons (project scope, budget size, flexibility in activities).

New emerging sector : Korea NFI program

Mr. Sungho Kim presented experiences of Korea National Forest Inventory. He introduced the outline of National Forest Plan, Fore4sts of Korea and History of Korean NFI. He specifically mentioned the 5th NFI (2006~2010) which is big turning point moving from periodic to annual Inventory System (core challenges, sampling design; 4000 plots, ground plot configuration, plot measurements & variables, forest type maps). Finally, he concluded with NFI results & issues (Cost-effective sampling design, Quality Assurance/Quality Control (QA/QC), Database management and analysis system, Human resources training).

IPCC Good Practice Guideline for LULUCF and Carbon estimations in Korea NFI program

Mr. Kyunghwak Lee outlined IPCC GPG for LULUCF and Carbon estimations in Korea. First, he mentioned GHG Inventory under UNFCCC (Under the KP- GHG Measuring & Reporting, In Post-2012 Climate Regime- MRV GHG inventory). Second, he mentioned IPCC GPG for LULUCF (Definition, Contents: 6 land use categories, 5 carbon pools, 3 tiers for activity data & emission factors, Approaches for estimating land-use area and area changes, Cross-Cutting Issues). Third, he introduced GHG Inventory System in Korea (Carbon Flux in Forests (2005) based on 1996 IPCC Guideline- LUCF in Korea: Net sinks, The GHG inventory system consists of 4 parts including activity data, emission/removal factors, and verification, Development of emission/removal factors (12 major tree species, 150 plots, & 5 carbon pools), Challenging Issues).

Introduction to ITTO REDDES program

Mr. Hwanok Ma briefed ITTO REDDES program. He mentioned 10 Demonstration Projects of ITTO REDDES program (2009: 3.9million USD), ITTO Thematic Programme on REDDES, A Public-Private Partnership to promote REDD, DONORS to ITTO, and Carbon financing.

Discussion

- It was discussed why the results of inventories in South Korea produce very different figures: e.g. the two official figures on the mean volumes have 20% gap. There are difficulties in calculating the inventory results of the 4000 plots
- Uncertainty levels of inventories especially in the developing countries and UNFCCC reporting requirements/acceptable error levels were discussed, emphasising the difficulties and expectations on realistic target levels.
- Satellite image resolution requirements are country specific. In USFS Landsat is appropriate, but in a country like South Korea, higher resolution is needed where there are many very land cover types and forest classes and the land use patterns are very detailed.
- USFS FIA has produced many interesting analysis on e.g. development of growing stock according to IPCC scenarios, which could be applicable in other countries, too
- Landsat TM images are used in the USA FIA system to provide local level estimated with K-NN methodology, it is a good example on integration of RS to field inventories.
- Comparison was made to FAO FRA reporting every 5th year, difficulties in providing reliable data for FRA and on the other hand reliable information from national forest inventories
- USFS has developed many tools and methods for NFI, which could be utilised in developing countries. E.g. tool for inventory design.
- Korea is changing the inventory system into a panel approach which will help in providing annual updated reporting on GHG
- GHG reporting is a very challenging task, if the changes between categories are measured it means 6 x 6 classes.
- It was discussed on uncertainties of different pools of the GHG inventories, better to concentrate on essential i.e. above ground biomass, of which the change monitoring is more applicable.
- More emphasis must be put on Quality Assurance & Quality Control systems in order to produce reliable data.



3.5. Session 3-1: Idealism or Reality? – A Status of NFI policy to mitigate climate change in partner countries

Current situation of Deforestation in the Asia Pacific region

Mr. Hyungkwang Kim presented the current situation of deforestation in the Asia Pacific region. First, he mentioned an outline of the world's forests and annual net change in forest area by continent between 1990 and 2005. The African forest land was decreasing the fastest in the world (2000~2005: -0.62%). Next, he introduced a deforestation situation of the Asia-Pacific region. The Asian forest land was increasing from 2000 to 2005 (0.18%), however, Southeast Asian forest was rapidly decreasing during the same period (-1.0%). Especially, during the first 5 years of the 21C, several countries lost more than 1.5% annually; it is the highest rate in the world. Therefore, he stressed we need a long-term strategy to prevent the deforestation in this region.

Country Presentations

Participants from 6 partner countries reported “A Status of NFI policy to mitigate climate change” in their countries. Each presentation consisted of 3 parts which were Current Situation of Deforestation and Degradation, Strategy to reduce Deforestation and Degradation, Brief on National Forest Inventory, and Suggestions for promoting and strengthening NFI System. The following was the title and order of presentation.

NFI experiences in Philippines

Availability of financial resources for NFI in Malaysia

Importance of NFI in the policy-making system of Myanmar

Reporting systems in Nepal

NFI and Forest management in Thailand

Government organization for NFI in Pakistan

Discussion

- Forest budget differs greatly from each country in terms of forest land size.
- Measuring trees in high mountain areas (Nepal). Need for permanent plot for assessing changes. Need to revise the sampling design to make in representative. Divided to ecological units. Need to concentrate where they are the forests.
- Forest area in some countries is a big difference between official statistics and this presentation.
- It was discussed internationally accepted sample density design.

3.6. Session 3-2: Idealism or Reality? – A Status of NFI policy to mitigate climate change in partner countries

Review of NFI in Asia and Pacific region in context of UNFCCC

Mr. Kailash Govil presented Emerging Dimensions of Demand and Supply of Information from National Forest Inventories in context of Climate Change and UNFCCC. First, he mentioned Emerging Scenario and Key Messages on forest information. Second, he explained Copenhagen 2009 Accord including MRV and New timber procurement standard. Third, he mentioned Estimating Carbon Stock Changes. He stressed only 13 countries of the world used the Tier 3 method, but not completely on all pools. Fourth, he introduced Variability in Sampling Design in Asian NFI.

Country Presentations

Participants from 7 partner countries reported “A Status of NFI policy to mitigate climate change” in their countries. Each presentation consisted of 3 parts which were Current Situation of Deforestation and Degradation, Strategy to reduce Deforestation and Degradation, Brief on National Forest Inventory, and Suggestions for promoting and strengthening NFI System. The following was the title and order of presentation.

Quality control of NFI in China

Extent of technical expertise in Mongolia

Relationship between National development and NFI in Laos

Strategy for NFI in Vietnam

Integration of NFI and MRV in PNG

Necessity of NFI in Solomon Islands

Carbon estimations in India.

Discussion

- Increasing information demand from national as well as international society
- Timber procurement procedures changed to include social criteria
- Lack of forest budget, especially for NFI
- Need to strengthen national forestry policies
- How to increase tier level (from tier 1 to tier 3) in NFIs?
- Information generation systems: different solutions for different levels- local, regional, national
- Precision requirements not specified internationally -
- Important to invest in QC/QA to minimize bias -at all levels, for all systems, etc.
- Need to generate guidelines on NFI QC/QA
- Whips and carrots: Legal measures and payments for environmental services
- Country objectives: Multipurpose – Narrow
- Country constraints: Lack of capacities- financial, human, knowledge, political priorities
- Cost sharing –sector collaboration
- Definition of inside and outside forest
- Precision of sampling
- How to correct errors in data
- Need for research
- Need for long term planning and training
- Combining production, protection and social benefits
- MRV –mitigation measures –

3.7. Session 4 : Working group sessions

A long-term strategy for NFI activities in the Asia Pacific region

Mr. Hyungkwang Kim presented a proposal for a long-term strategy for NFI activities in the Asia Pacific region. This was a follow-up for the previous presentation (Session 3-1: Current situation of Deforestation in Asia Pacific region). First, he mentioned requirements to reduce deforestation and degradation in this region. Next, he briefed the criteria for priority country selection and the results of criteria application. The list of tentatively selected priority countries and the size of their required funds were as follows.
The first priority countries: Myanmar (US\$ 2.5million), Cambodia (US\$ 2million)
The second priority countries: Mongolia (US\$ 1.5million, Philippines (US\$ 1.5million)
The third priority country: North Korea (US\$ 1.5million)
The fourth priority countries: Bhutan(US\$0.5million), Solomon Islands(US\$0.5million)
Finally, he suggested the necessity for the creation of ***Regional multipurpose NFI project (Total budget: US\$ 10million, Duration: 5 years, Countries: 7).***

East Asia Climate Partnership Program of Korean Government

Ms. Hyeon Kim introduced East Asia Climate Partnership Program of Korean government. First, she mentioned the goal of this program which is to create win-win synergy between the climate and the economy in East Asia by exploring Low Carbon Green Growth paradigm. Second, She explained Background (Korea announced a plan to launch East Asia Climate Partnership (\$200 million for five years) to this region of dynamic economic growth. Third, she briefed 1st East Asia Climate Forum (May 29, 2009) and Implementation mechanism (process and institutions).

Discussion

- Is East Asia Climate Partnership Program supporting only limited on SFM or on all forestry issues? - Depends on the contents of the projects
- Collaboration with other international organization. Focus only on East Asia region or also on other region - The funding is limited so Korea not considering to go out of the Asia Pacific region. Korea working with international organizations. KOICA is the main channel.
- Procedure for submitting proposal? - Through Korean embassy
- Timetable? - every year circulating request form to developing countries before March and April. Decision in October and November
- Number and amount of the countries are not limited but it is being taken into account.
- KOICA prefer bilateral not multilateral. Forestry sector is small part - Hope that cooperation will be expanded with international organization. Forestry is an area that can produce a good result comparing to investment, so Korea need to support more. Korea Forest Service needs to be more involved in the process.
- Closer cooperation between KOICA and FAO is needed in the future.

Guide for the Working group discussion

Mr. Dan Altrell and Ms. Anne Branthomme briefed ToRs (Terms of Reference) for this Working group sessions. First, all participants were distributed between the 2 Working Groups.

Working Group1 was composed of 6 country representatives (Myanmar, Thailand, Malaysia, Pakistan and Philippines), 2 experts (Mr. Vidal, Mr. Coulston) and 2 FAO staffs (Mr. Altrell, Mr. Otsuka). Working Group 2 was composed of 7 country representatives (China, Vietnam, Laos, Mongolia, PNG, Solomon Islands and India), 1 Donor (JICA) and 2 FAO staffs (Ms. Branthomme, Mr. Kim).

Second, they explained discussion topics of each Working Group session.

The main topic of Session 1 was “Priorities for and requirements from the NFI in connection with climate change” and another of Session 2 was “What should the role of three main actors (countries, FAO, donors) be for NFI activation in connection with climate change?”. Each working group discussed both of those topics.

Working Group discussion

First, Participants of each working group selected their Chair (Group1: Mr. Tosporn Vacharangkura- Thailand, Group2: Mr. Shiv Raj Singh- India) and Rapporteur (Group1: Mr. Pem Narayan Kandel- Nepal, Group2: Ms. Ruth Turia- PNG).

Second, they discussed following specific topics of session 1.

1. What is the NFI status of each country related to climate change reporting or equivalent (tier level I, II, III)?
2. What is the target of each country’s climate change reporting (tier level I, II, III)?
3. Which are each country’s objectives for NFI improvements?
4. Which are the main gaps and constraints to reach target tier level/ objectives?

Third, they discussed Specific topics of working group session 2 were as follows.

1. Which are the recommendations for Actions to be taken / Recommendations?
2. Which Actor(s) are recommended as Main Responsible for each recommended Action
3. What is the estimated Timeframe for each recommended Action?
4. What is the estimated Cost for each recommended Action?
5. Other key conclusions / Recommendations

Fourth, during the discussion, they expressed the following opinions relating to the target of each country’s climate change reporting (tier level 1, 2, 3)

- Target must be to reach up gradually
- Compatible with international demand and national need/capacity
- Institutional building processes
- Take time, fund and capacity to generate data.
- Need National priority and support from the international communities (donors).
- Setting time line is important?
- Phase wise approach (immediate and long term).

3.8. Session 5 : Next steps for the NFI in the Asia Pacific

Working Group discussion results

Working Group1

Mr. Pem Narayan Kandel presented results of WG 1 discussion.

First, he mentioned NFI status of each country related to climate change reporting. He introduced that WG members reviewed and found that among 6 WG countries, 3 were Tier level 1 and the rest were Tier level 2 (Their target was Tier 2 or 3.)

Second, he explained each country's objectives for NFI improvements. The order of priorities were Consolidated national policies, Sustainable use of forestry resources, Enhanced protection of forestry resources, Improved livelihoods, Food security, Forestry research, and Climate change mitigation (carbon market).

Third, he briefed the main gaps and constraints to reach target Tier level/objectives. The order of priorities was Technical capacities & methodologies, Institutional capacities / legal framework, Financial capacities, Political priorities and will, and Human resources.

Fourth, he mentioned the recommendations for Actions to be taken as follows.

1. In terms of Technical capacities & methodologies aspects, the order of priorities were Developing methodological framework (formulating, testing adopting), Trained the personnel and retained, Networking, Partnership among the stakeholder within and outside the countries.
2. In terms of Institutional capacities / legal framework, and Financial capacities aspects, the order of priorities were Prioritizing and allocating more Fund, Institutionalization the whole functions needed for NFI, and Developing Partnership to increase the national capacity on NFI.
3. In terms of Political priorities and will, it was Lobbying.
4. In terms of Human resources, it was Collaboration with Academic and research institutions.

Fifth, he listed main responsible actors for each recommended action as follows. FAO, ITTO, JICA, USAID, FINNIDA, DFID, SIDA, AUSAID, KOICA, GTZ, French, EU, UNF, UNEP, UNDP, GTF, WB, ADB, and National government.

Sixth, he explained the estimated Timeframe and Cost for each recommended Action for each country as follows.

1. **Philippines** : 2, 5, 10 years (2, 5, 5 million USD)
2. **Myanmar** : 2, 5, 10 years (2, 3, 5 million USD)
3. **Thailand** : 2, 5, 10 years (1, 5, 7 million USD)
4. **Nepal** : 2, 5, 10 years (2, 6, 7 million USD)
5. **Malaysia** : 2, 5, 10 years (2, 5, 5 million USD)
6. **Pakistan** : 2, 5, 10 years (1, 3, 5 million USD)

Working Group 2

Ms. Ruth Turia- PNG presented results of WG 2 discussion.

First, she mentioned NFI status of each country related to climate change reporting. She introduced that WG members reviewed and found that among 7 WG countries, 6 were Tier level 1 and the rest was Tier level 2 (Their target was Tier 3.)

Second, she explained each country's objectives for NFI improvements. The order of priorities were Sustainable use of forestry resources, Improved livelihoods, Consolidated national policies, Forestry research, Biomass and Carbon stock, Forest Conservation, and Ecological security.

Third, she briefed the main gaps and constraints to reach target Tier level/objectives. The order of priorities was Technical capacities & methodologies, Institutional capacities / legal framework, Financial capacities, Human resources, Political priorities and will, and Land Tenure (Solomon Islands & PNG).

Fourth, she mentioned the recommendations for Actions to be taken as follows.

1. Training with specific skills (RS/GIS/NFTRI)
2. Collaborate with other national and international agencies
3. Recruitment of qualified personnel
4. Appropriate and sufficient budget (national/external)
5. Conduct necessary research to establish REL/RL and improve methodologies
6. Develop appropriate policies to enhance effective utilization of the forest resources (e.g., Land tenure and mitigation/adaptation actions to address climate change)
7. Build up national capacity
8. Build up institutional capacity (e.g. review and amend legislation to take on board issues relating to climate change)
9. Develop common guidelines on monitoring & reporting REDD, especially for degradation

Fifth, she listed main responsible actors for each recommended action as follows. National Government. FAO, Other international agencies, National organizations, and other donor agencies.

Sixth, he explained the estimated Timeframe and Cost for each recommended Action for each country as follows.

1. *Mongolia : 10 years (5 million USD)*
2. *Solomon Islands : 5 years (2 million USD)*
3. *Laos : 5~10 years (1 million USD)*
4. *Vietnam : 5 years (20 million USD: Govt, 2 million USD: Intern'l Organization)*
5. *PNG : 5~10 years (10 million USD)*
6. *India : 5 years (National Budget, 0.5 million USD)*
7. *China : 5~10 years (5 million USD)*

General Open Discussion

- WG conclusions gave some good insight.
- Precise moment to increase the focus and attention on forest.
- More opportunities now than in the past.
- Potential area for further collaboration.
- Suggestion for establishment a working group for NFI under RFC –AP to activate development and implementation of NFI at regional and international level.
- No time to discuss the use of south-south collaboration.
- Some countries are more advanced and the main responsible actors, also could be the neighboring countries.
- Transfer of technology between countries in the region.
- WG2 came from going from a tier 1 to tier 3 within a 5 years timeframe. How duable this would be? - depend on country specific. Some want to go from 1 to 2 and other from 2 to 3.
- How food security is related to NFI? - Indirect beneficiary of better information is better policy, better livelihood and better food security.

A summary of the Working Group findings can be found in Annex 5.11.1

Workshop Conclusions and Recommendations

A draft of the Workshop Conclusions/Recommendations were presented, reviewed by all participants and endorsed by the meeting. (see section 4).

Closure of the Workshop

In his closing remarks, Mr. Jose Antonio Prado stressed the importance of identifying gaps and needs for NFI and the establishment of WG to streamline methods and be a platform for discussions within the region. Finally, he expressed the sincere thanks to all participants and declared the Regional Workshop closed.

3.9. Session 6 : Field trip - Visit to the Sample Plot of Korean NFI

To make a practical connection to national forest inventories the workshop offered a field trip. Representatives of Korea Forest Research Institute, led by Mr. Sungho Kim, accompanied the workshop participants to the forests near Korea National Arboretum, where they demonstrated how sample plots within the Korean NFI are identified and established in the field, and how the typical field measurement and observations are carried out. The demonstrations raised much curiosity among the participants and triggered many questions to learn more about the Korean methods for field data collection. Mr. Sungho Kim explained the theory behind the measurements and happily attended any question from the participants.

After the field demonstrations the participants were guided through the exhibition halls of Korea National Arboretum (KNA) and were shown the Korean diversity in nature, culture and craftsmanship. KNA has combined a mix of expositions and interactive presentations to attract the eyes and minds of the visitors, and by doing so they have succeeded to create a pedagogic centre for spreading the knowledge on their national heritage to both international and domestic visitors at all ages.