



THE REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF ENVIRONMENTAL CONSERVATION AND FORESTRY
FOREST DEPARTMENT

PROCEEDINGS OF INTERNATIONAL WORKSHOP ON REDD+ AND SUSTAINABLE LANDUSE MANAGEMENT IN MYANMAR

16th ~ 18th December 2014, Nay Pyi Taw, Myanmar



Edited by

Thaung Naing Oo, Hwan-Ok Ma, Nobuya Mizoue and Inkyin Khaine

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ITTO – REDD Project “Capacity building for developing REDD+ Activities in the Context of Sustainable Forest Management” RED-PD 038/11 Rev.3(F) is based on national priority and recommendation identified by the international organization such as ITTO and UN-REDD Programme that capacity building is needed at all level in order to fully implement REDD-plus. One of the specific project objectives is to strengthen the capacity of Government staffs as well as other relevant stakeholders in REDD-plus initiatives. This is a proceeding of the International Workshop on REDD+ and Sustainable Landuse Management in Myanmar.

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I . Background

Climate and land use changes are the major ecological concerns and the combined influence of these factors forms as a big strike onto natural dynamic system. Moreover, deforestation and forest degradation has been found in worldwide scale. Therefore, forests have been played as a vital role for both ecosystem maintenance and reducing global greenhouse gas emissions. Not only for reducing deforestation but also for limiting global warming to 2°C, the rate of deforestation will have to reduce 50% by 2020 and 350 million hectares of land will have to restore while at the same time forest loss will have to eliminate by 2030.

REDD+ (Reducing emission from deforestation and forest degradation, the role of forest conservation, sustainable of forest management and enhancement of carbon stock) is the win-win strategy that can lessen greenhouse gases emission and support sustainable forest management in developing countries. It can also provide ecosystem services to local community and reduce severe climate change, and it can be clearly seen that the REDD+ target achievement can be encouraged by sustainable landuse policy.

The Republic of the Union of Myanmar is one of the tropical countries and the forest covers 46% of the total land area whereas deforestation and forest degradation has been found as one of the major problems with an annual rate of forest lost by 310,000 ha. Therefore, Forest Department has been implementing forest conservation activities including thirteen forest operations, REDD+ activities for reducing Green House Gas (GHG) emissions as well as enhancing forest carbon stocks and environmental services. Since Myanmar has become a member of ITTO and UNFCCC, the conservation activities have been accelerating until now.

On the other hand, Government is currently emphasizing on the development of national landuse policy with the aim to address the conflicts of land tenure and landuse changes which are currently facing and to set up effective management of natural resources. To develop effective national landuse policy, it should be formulated based on careful consideration to harmonize economic development, owner right and ecosystem stability. For this, all management sectors in collaboration with local people are involving in the formulation of national landuse policy.

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From forestry side of view, establishing the Permanent Forest Estate up to 30%, Protected Area System up to 10% and changeable or reserved land up to 11% have to be done in 2030 according to the 30 year master plan with the aim to meet the need of the increasing population and sustainable development. To achieve these targets and goals appraised by forest management plan, the forest area must be fixed and managed under the authority of forest department and must have land tenure right without any changeable. In addition, without clear and effective landuse policy, the implementation activities of REDD+ and additional operations cannot be taking effectively and easily. This can hinder the achievement of the targeted plan and lead to threaten the whole programs. So, this is the right time to catch the opportunity by collaborating in the formulation of national landuse policy.

This International Workshop on REDD+ and Landuse in Myanmar is timely held to facilitate discussion on information and experiences which would be essential for establishing landuse formulation process to ensure the enhancement of conservation and management of forest lands in the context of REDD+. The workshop was participated by the representatives from MOECAAF, line ministry, INGOs./NGOs, CSOs and international distinguished guests.

II. Objective and Key Messages of the International Workshop

The workshop has been conducted to fulfill the following objectives:

- (a) To update the recent development of REDD+ negotiations and discussions by raising the public awareness of the multiple benefits of forests as a natural capital,
 - (b) To increase the potential roles of forests and REDD+ in land use policy formulation,
 - (c) To share information and experiences of land use planning and management policy development to support the effective design and implementation of REDD+ Strategy and Action Plan, and
 - (d) To accelerate the implementation of REDD+ Readiness Process in the context of sustainable forest management to support sustainable development.
- There is an increasing challenge to strengthen the current and potential contributions of sustainable forest management (SFM) against demanding pressures on deforestation and forest degradation and sustainable development challenges. Ensuring SFM in Myanmar has been and will be continuously important as various products from the forests have been playing essential roles for local livelihoods and national economy.
 - REDD+ presents challenges but also provides opportunities. REDD+ offers an important opportunity for investment in emission reductions and carbon sequestration in tropical countries through strengthened land management and tenure systems. Over the years broad consensus more tenure rights to forest communities are pre-requisite for devolved forest governance. With the emergence of REDD+ there is new revival of impetus and at various institutional levels in REDD+ implementation attention is being focused to securing tenure rights.

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- REDD+ like SFM requires sustainable land use management systems to ensure that forests are to be kept for the conservation of biodiversity, protection of ecosystems, production of forest goods or conversion of forests into other land uses. Land allocation to different uses and spatial planning within and outside forests is crucial to enhance the effective design and implementation of SFM and REDD+.
- One fundamental institution for understanding sustainability in land management and design effective policies is “property rights” (PRs). Clear property rights over land and the natural resources attached to it, including carbon, are important for giving incentives for sustainable forest and land-use management and avoiding conflicts and successful REDD+ implementation. PRs are key for attracting external actors willing to put resources in the projects and initiatives and making communities more likely to participate as co-managers in case their tenure rights are strengthened. Aligning land and forest policies and PRs at the different levels can build institutions for sustainable land use management and REDD+.
- SFM and REDD+ requires more inclusive stakeholders’ participation to resolve disputes over land tenure for indigenous people and enhancing forest use rights for forest-dependent communities. Supportive measures are important to ensure that indigenous and local communities know their recognized tenure, access and use rights as well as capacities to sustainably manage forest resources which are often a large gap for indigenous and local communities.
- In the planning, implementation and evaluation of REDD+, addressing economic issues will be one of the principal challenges. Without sustainable livelihoods improvement, indigenous and local communities may prefer to convert forests to other land uses. Forests are vital to achieving global sustainable development but there is the continued challenge for the improvement of economic contribution from SFM and REDD+.
- Myanmar Selection System (MSS) is one of the historically longest ongoing forestry operations over the world, and especially, elephant skidding is considered one of the advantages of MSS as compared with other countries’ cases. Comprehensive, systematic and scientific evaluations of MSS would provide us crucial insights for key solutions of implementing SFM not only in Myanmar but also in other countries. There is strong evidence that felling operation and elephant skidding under MSS have relatively low impacts on residual stands. Those practices cause a relatively small loss of carbon, conserve most forest biodiversity, and protect watersheds.

- In recent years, remote sensing data have confirmed that forest degradation as well as deforestation is increasing in Myanmar like in other many tropical countries. Forest degradation is also found in production forests under MSS. One of the key measures to deal with current issues is to ensure effective MRV monitoring systems not only for carbon stocks but also various forest ecosystem services including socio-economic dimensions in the context of SFM.
- Synergies and complementarities between SFM and REDD+ are vital. Developing effective REDD+ strategies and policies can be achieved taking into account practices and experiences from the implementation of SFM which is a means of ensuring long-term maintenance and enhancement of goods and environmental services. Scaling up the lessons from Myanmar's agroforestry and community forestry is essential for the design of REDD+ activities. Research and extension have an important role to play in both SFM and REDD+, particularly in raising awareness of the importance of the role of tropical forests in addressing many of the most pressing sustainable development challenges. Both SFM and REDD+ require good knowledge and implementation of how tropical forests are being sustainably managed for the benefits of the current and future generations.

III. Structure of Workshop

The international workshop was held on 16th ~ 18th December 2014 at Forest Department, Nay Pyi Taw. The workshop was made up of eight sessions which are:

- Session I:** Opening Session;
- Session II:** Capacity Development for REDD+ and Sustainable Forest Management (SFM);
- Session III:** REDD+ MRV and REL/RL, and Poster Presentation;
- Session IV:** Case Studies for REDD+;
- Session V:** Sustainable Landuse Management;
- Session VI:** Forest Tenure, Safeguards and Gender Consideration for REDD+ and SFM in Myanmar;
- Session VII:** Panel Discussion – The way forward for development of REDD+ in the context of sustainable landuse and forest management in Myanmar and
- Session VIII:** Closing Session.

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Of eight sessions, the first day of the workshop was composed of four sessions and the same number of session was included in the second day. The field visit to logging areas and REDD+ project site and discussion on activities was done in the last day of the workshop. The agenda of the workshop program is attached as Annex – 1.

In the opening session, the opening speech was addressed by His Excellency Union Minister of the Ministry of Environmental Conservation and Forestry (MOECA) (See Annex – 3) and then followed by the congratulatory remarks of Dr. Hwan-Ok Ma, Projects Manager of ITTO (See Annex-4); Dr. Kazuo OGATA, Senior Vice President of Kyushu University (See Annex-5) and Mr. Timothy Boyle, Regional Coordinator of UN-REDD Programme (See Annex-6). The agenda of the opening session is in Annex – 1.

Session II was chaired by U Tint Swe, Director of Training and Research Development Division, Forest Department. In this session, four resource papers relating to the capacity development for REDD+ and SFM were presented by Dr. Hwan-Ok Ma, Dr. Kazuo OGATA, Mr. Timothy Boyle and Dr. Thaug Naing Oo in serial order. Then, the session was ended with discussion session.

REDD+ MRV and REL/RL was the third session and Dr. Nobuya Mizoue, Professor of Kyushu University chaired the session. Four technical papers were presented by Dr. I Wayan Susi Dharwawan, Dr. Testuji Ota, Dr. Ismail Hj. Parlan and Dr. Maung Maung Than. They shared the experiences and research findings of MRV, REL/RL and effective participation of stakeholders in Indonesia, Cambodia, Malaysia and Myanmar. At the end of the session, the information relating the REDD+ MRV and REL/RL was encouraged by discussion.

For session IV which was entitled as the session for Case Studies for REDD+, U Bo Ni, Director of Watershed Management Division, Forest Department, executed as a chairman. Dr. Yasumasa Hirata, Daw Khin Hnin Myint and Mr. Yukio Wada were the presenters of this session and the presentations were followed by the discussion session.

The second day of the workshop was started with Sustainable Landuse Management Session, Session V, which was chaired by Dr. San Win, Pro-rector of the University of Forestry. Seven presentations were presented in this session and the participants discussed on the papers and made some questions.

For session VI, Dr. Jose A. Puppim de Oliveira from United Nations University-IAS carried out the whole session as a chairman. In this session, five resource papers which are relating forest tenure, safeguards and gender consideration for REDD+ and SFM in Myanmar were presented by resource persons from NGOs, government staffs and international participants. After their presentations, discussions were made by the participants.

Session VII is the Panel Discussion session moderated by Dr. Hwan-Ok Ma, Projects Manager from ITTO. Seven panelists were discussed in order to find out the way forward for the development of REDD+ in the context of sustainable landuse and forest management in Myanmar. Then, the session was concluded by asking questions and giving discussion and suggestions through the involvement of the participants.

In the poster presentation session, thirteen posters were displayed in this session and three minutes brief presentations for each poster were done by the related poster presenters.

The closing ceremony of the workshop was held at the Ingyin Hall of Forest Department, Nay Pyi Taw and it was successfully closed with the kind remarks of Dr. Nyi Nyi Kyaw, Director General of Forest Department. The full text of the closing remarks by Dr. Nyi Nyi Kyaw, Director General of Forest Department appears as Annex – 7.

On 18th December 2014, the participants joined the field visit to Taungoo Diristrict of East Bago Yoma in which the ITTO project site is situated and they observed Elephant Logging (logging by elephant), forest conservation activities and REDD+ activities.

Not only the government staffs and international participants but also the representatives from NGOs and CSOs participated on the workshop. Total of (128) participants attended this workshop as follow:

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1.	Resource Persons	23
2.	Representatives from the Ministry of Environmental Conservation and Forestry	49
3.	Representatives from line ministries	9
4.	Representatives from INGOs/ NGOs	28
5.	Representatives from private organizations	3
6.	International distinguished guests	8
7.	Representatives from media	8
	Total Participants	128

Annex – 2 shows the list of participants of the workshop and the record of the International workshop proceeding REDD+.

SESSION I

OPENING SESSION

1.1 Opening Speech



Opening speech by His Excellency Union Minister, Ministry of Environmental Conservation and Forestry

The International Workshop was officially inaugurated by His Excellency Union Minister of the Ministry of Environmental Conservation and Forestry (MOECAF) of Myanmar.

In his honorable speech, he firstly extended his warmest welcome to

Deputy Minister, Dr. Hwan-Ok Ma from ITTO, Pro-Rector and Professors from Kyushu University and United Nations University, officials from line ministries, representatives from UN-REDD Programme, international organizations, local CSOs and NGOs, distinguished

guests and participants. He also expressed his great honor and pleasure to deliver on the opening speech of “International Workshop on REDD+ and Sustainable Landuse Management”.

Then, His Excellency Union Minister, briefly touched upon the cooperation between his Ministry and ITTO that Myanmar joined ITTO since 1993, and from that time, eight projects have been implemented, and the REDD+ project with the aim of strengthening capacity of the government staff as well as other relevant stakeholders for the implementation of REDD+ is still on-going with the support of ITTO. Additionally, he stated that Myanmar has been currently planning to implement the REDD+ Readiness Roadmap with the support of UN-REDD Targeted Support and has been presently implementing pilot projects in cooperation with international partners.

With the aim to emphasize the important role of forests, land-use changes and REDD+ activities in climate change mitigation, the Union Minister also highlighted “New York Declaration on Forests” which was declared during the United Nations Climate Summit in September 2014, “ASEAN Joint Statement on Climate Change” from 25th ASEAN Summit held in November

2014 and “Aichi Biodiversity Target and Nagoya Protocol” under UNCBD. Likewise, he pointed out the crucial importance of capacity building and institutional strengthening for sustainable management of forests as well as for REDD+.

Furthermore, he said that the line ministries, NGOs, CSOs, local communities and relevant stakeholders are strongly encouraged to work together to reach the goal since the REDD+ is cross-sectoral mechanism. He then continued to the aims of the international workshop and he expressed his belief on the outputs of invaluable recommendations and outcomes from this international workshop to support the successful implementation of Myanmar’s REDD+ Roadmap and sustainable land-use management. After that, the Union Minister concluded his opening speech and expressed his appreciation for cooperation and presence at this propitious occasion. The full text of the Union Ministers’ Speech appears as Annex – 3.

1.2 Congratulatory Remarks from ITTO



Dr. Hwan-Ok Ma, ITTO Projects Manager, delivering Congratulatory Remarks

Firstly, Dr. Hwan-Ok Ma, Projects Manager of International Tropical Timber Organization (ITTO), expressed his appreciation and extended heartfelt thanks to His Excellency Union Minister, His Excellency Dr. Thet Thet Zin, Deputy Minister, Prof. Dr Kazuo Ogata from Kyushu University, Mr. Timothy Boyle from UN-REDD programme, representatives of

International Government Organizations and Non-government Organizations and participants. He also expressed deep appreciation on behalf of ITTO to the donor, namely the Governments of Norway, Switzerland, USA and Japan for raising the fund for the ITTO project.

Dr. Hwan-Ok Ma also highlighted the role of tropical forests and the importance to have robust land-use planning and sustainable land use management systems in order to sustain the tropical forests. He believed that this international workshop will provide good opportunities to review the effective sustainable land use systems, the fundamentals of REDD+ and the negotiation outcomes of the recent COP 20 in Lima, Peru. Moreover, he highlighted that Myanmar has been cited as one of 10 tropical countries with the highest annual deforestation rate assessed at 1.3 % in the last decade of 20th century, and so, to establish and implement effective REDD+ strategies and action plans towards strengthening sustainable land management systems is crucially needed in Myanmar.

He said that he was pleased to recognize the significant improvement of mutual trust between communities and the Forest Department in the project sites of the Taungoo District and he noted that continued investments in the management capacity of local communities are vitally important because insufficient assistance for livelihood improvement and low level of social and human capacity of local

communities for forest management is still a major challenge. He also mentioned his unforgettable memories on working in dry zone greening activities in Myanmar as a Korean reforestation advisor in the last two decades ago. He then touched on the New York Declaration on Forests adopted at the UN Climate Summit in last September and he explained that this Declaration calls for action to conserve, sustainably manage and restore forests for their contribution to green economy, poverty reduction, food security, climate resilience and biodiversity conservation. Furthermore, he trust on the coming out of more innovative, integrative and inclusive REDD+ related policies and activities and he wished the continued success of MOECAAF in particular the continued leadership of HE U Win Tun towards the advancement of SFM.

Finally, Dr. Hwan-Ok Ma, Projects manager of ITTO, concluded that he strongly believe MOECAAF for the way forward which will address the challenges of REDD+ and lead to sustainable forest management. The congratulatory remarks of Dr. Hwan-Ok Ma is given in Annex – 4.

1.3 Congratulatory Remarks from Kyushu University of Japan



Prof. Dr. Kazuo OGATA, Senior Vice President, Kyushu University, delivering Congratulatory Remarks

In the opening remarks of Dr. Kazuo OGATA, he expressed his sincere appreciation for His Excellency Union Minister of Environmental Conservation and Forestry (MOECAF) of Myanmar, Dr. Nyi Nyi Kyaw, Director General of Forest Department, Myanmar, Dr. Hwan-Ok

Ma, Projects Manager, International Tropical Timber Organization (ITTO), Mr Timothy Boyle, Regional Coordinator of UN-REDD programme in Asia and the Pacific region, Dr. Thaug Naing Oo, Director of Forest Research Institute, and distinguished participants.

Dr. Kazuo OGATA stated that the earth is facing many environmental and social crises, and most are serious, especially in countries in Asia with accompanying rapid economic growth. For this, he highlighted that efficient collaboration among different stakeholders, such as policy makers, governmental officials, NGOs, villagers and scientists is needed to solve the issues. Then, he mentioned that this international workshop will provide opportunities to enhance the networking and to facilitate discussion among different stakeholders to solve the problems.

Besides, Dr. Kazuo OGATA also extended his heartfelt appreciation to Myanmar government to allow 74 staffs to study in Kyushu University, among which, nine staffs are from MOECAAF. He again explained about the new project of Japanese Government which the main target is to promote international activities, also an opportunity for future cooperation with Myanmar. In conclusion, he said that this international workshop will be connecting further close collaboration with Kyushu University. The full text of the congratulatory remark by Dr. Kazuo OGATA is given in Annex –5.

1.4 Congratulatory Remarks from UN-REDD Programme



Mr. Timothy Boyle, UN-REDD Programme, Regional Coordinator, delivering Congratulatory Remarks

On behalf of the UN-REDD programme, Mr. Timothy Boyle, Regional Coordinator of UN-REDD programme in Asia and the Pacific region delivered that he congratulated all Excellencies, colleagues and participants. He said that all participants of the workshop are trying to ensure forest conservation and sustainable forest management and thus contributing to many environmental and social benefits. He also said that this is a great enhancement for moving green environment and he congratulated all the participants of the workshop. Then,

he shared the history and information relating REDD+ concept and work mechanism through his experiences in UN-REDD. Then, Mr. Timothy Boyle supposed that the workshop was timely and important, and Myanmar could follow in the steps of Brazil and others. He then encouraged all of the participants to focus the efforts to setting the foundation for rapid progress in Myanmar. Finally, he expressed his thanks to Forest Department again. Annex-6 shows the congratulatory remarks of Mr. Timothy Boyle.

SESSION II

**CAPACITY DEVELOPMENT FOR
REDD+ AND SUSTAINABLE
FOREST MANAGEMENT (SFM)**

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U Tint Swe, Director of Training and Research Development Division, Forest Department, Acting as the Chairperson during the Workshop

The presentation session was chaired by U Tint Swe, Director of Training and Research Development Division of Forest Department, Myanmar. The four topics presented by the speakers under this session were:

1. Strengthening Sustainable Forest Management (SFM) and REDD+: Increasing sustainable landuse management and green economic growth is crucial by Dr Hwan-Ok Ma, Projects Manager, ITTO;
2. Development of REDD+ and the role of UN-REDD Programme
3. Sustainability of selective logging based on recent research in Myanmar and Cambodia by Dr. Nobuya Mizoue, Professor, Kyushu University, Japan and
4. REDD+ governance, policy and strategies of Myanmar by Dr. Thaung Naing Oo, National Project Manager of ITTO REDD+ Project, Director of Forest Research Institute, Forest Department, MOECAAF, Myanmar.

(1) Strengthening Sustainable Forest Management (SFM) and REDD+: Increasing sustainable landuse management and green economic growth is crucial by Dr Hwan-Ok Ma, Projects Manager, ITTO

The presentation, “Strengthening Sustainable Forest Management (SFM) and REDD+: Increasing sustainable landuse management and green economic growth is crucial”, was made by Dr. Hwan-Ok Ma, Projects Manager, ITTO. In his presentation, the major things he talked about were ITTO and SFM, REDD+ negotiation, ITTO REDDES Thematic Programme, challenges and opportunities for REDD+, PES and SFM and the way forward for REDD+, PES and SFM.

In his presentation, he highlighted the role of forests and the New York Declaration on Forests, which was adopted at the UN Climate Summit in September 2014. He also discussed the United Nations Conference on Sustainable Development (Rio+20). The Rio+20 outcome document, The Future We Want, reaffirmed that the wide range of products and environmental services provided by forests creates opportunities to address many of the most pressing sustainable development challenges, and it supported cross-sectoral and cross-institutional policies that promote SFM. In light of such recognition, he



highlighted that there is an increasing challenge to strengthen the current and potential contributions of sustainable forest management (SFM) against demanding pressures on deforestation and forest degradation.

Then he briefly explained REDD+ concept, pathway and requirements. He also explained the ITTO Thematic Programme on REDDES (Reducing Deforestation

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and Forest Degradation and Enhancing Environmental Services), carbon markets, payment for environmental services and market development. He stated that REDD+ requires sustainable land use management systems; one of the essential elements for reducing deforestation and forest degradation was sound land use planning in which forests were to be kept for the conservation of biodiversity, protection of ecosystems, production of forest goods or conversion of forests into other land uses.

Based on these points, he pointed out that land allocation to different uses and spatial planning within and outside forests was crucial to enhance the effective design and implementation of REDD+ activities. In order to support the permanence of forests, the framework of Permanent Forest Estate (PFE), whether public or private land, secured by law and kept under permanent forest cover, has been promoted to ensure the social, environmental and economic values of forests at a landscape level.

Regarding on this, he talked about how adoption of a national forest planning framework at national and/or landscape level was crucial and how supportive measures were important to ensure that indigenous and local communities know their recognized tenure, access and use rights as well as capacities to sustainably manage forest resources. Then, he

presented that without sustainable livelihoods improvement, indigenous and local communities may prefer to convert forests to other land uses.

Finally, he concluded his presentation with the remarks:

- Forests are vital to achieving global sustainable development but there is the continued challenge for the improvement of economic contribution from SFM and REDD+.
- REDD+, PES and SFM in place in tropical countries through building long-term capacity on governance and MRV and enhancing long-term financing mechanisms to sustain tropical forests.

(2) Development of REDD+ and the role of UN-REDD Programme by Mr. Timothy Boyle, Regional Coordinator, UN-REDD Programme, Asia and Pacific Region

Mr. Timothy Boyle, Regional Coordinator, UN-REDD Programme, Asia and Pacific Region presented on the development of REDD+ and the role of UN-REDD Programme. He started his presentation with a brief introduction of REDD+, Cancun agreements, UNFCCC guidance and other mechanisms, and at last, he discussed what the UN-REDD Programme is. He explained that since the introduction of REDD+ as part of the Bali Action Plan at COP13 in 2007, there have been a number of subsequent COP decisions, resulting in the “Warsaw Framework on REDD+”, agreed at COP19, in 2013, which is considered as the “rulebook” for REDD+.

He also highlighted that many countries have been developing their capacities to design and implement national REDD+ programmes in parallel with the negotiations leading to the Warsaw Framework. In here, he mentioned that various partners, including the UN-REDD Programme, have been supporting these efforts. Then he continued his presentation on discussion of the implications of the Warsaw Framework for REDD+ on the design of



national REDD+ programmes and the presentation was ended by describing 16 countries in the Asia/Pacific region which are being supported by UN-REDD Programme.

(3) Sustainability of selective logging based on recent research in Myanmar and Cambodia by Dr. Nobuya Mizoue, Professor, Kyushu University, Japan

Dr. Nobuya Mizoue, Professor, Kyushu University, Japan, briefed on the sustainability of selective logging based on recent research in Myanmar and Cambodia. He firstly explained about deforestation and degradation and a brief introduction of selective logging. Selective logging in tropical forests has been often criticized, saying that it would lead to deforestation and forest degradation. On the other hand, reduced impact logging (RIL) is widely expected as a sustainable way. He then mentioned that there have been limited data and evidences to evaluate sustainability of selective logging, especially in tropical forests in the mainland Asia. Therefore, he said that his team evaluated some important components of selective logging such as logging intensity (number of felled trees /ha), logging damage on residual trees, logging frequency (rotation).

Based on the studies, he explained that the similarities in results between Myanmar and Cambodia and logging intensity, around or less than 5 trees/ha, were relatively low in both countries as compared with reports in tropical rain forest region in Asia and Amazon. He then talk about the rate of logging damage that it caused by one-felled tree



was around 2% in both countries, which is compatible to some results for tropical rain forest region. He guessed that one of the critical concerns was higher logging frequency than commonly adapted 30-year rotation.

Moreover, he shared the investigation of how forest stands could be degraded in compartments with higher logging frequency than those with lower one in Myanmar. He stated that illegal loggings in selectively logged production forests are likely to be critical issues, calling for more systematic and quantitative

evaluation of illegal logging in both countries. In conclusion, he highlighted that logging intensity and logging damage was low in both Myanmar and Cambodia, and Myanmar Selection System (MSS) itself does not cause forest degradation whereas higher logging

frequency and unplanned logging after planned operation have been found in both countries. He proposed that local community-based forestry would be one of possible ways to achieve sustainable forest management in selectively logged production forests in tropical Asia.

(4) REDD+ governance, policy and strategies of Myanmar by Dr. Taung Naing Oo, National Project Manager of ITTO REDD+ Project, Director of Forest Research Institute, Forest Department, MOECA, Myanmar



Dr. Taung Naing Oo, Director of Forest Research Institute, presented on “REDD+ governance, policies and strategies of Myanmar” which was composed of four parts; environmental governance

in Myanmar, major driving forces for REDD+ readiness, candidate strategies for REDD+ and the way forward for implementation of REDD+ readiness. Firstly, he expressed his thanks to the

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funding organizations and all participants of the workshop. He then explained the purpose of the presentation and he started his presentation with a brief introduction of environmental governance. He briefly explained the key points of presidential policy guidelines which is a strong political support for REDD+ activities; policies and legislations; strategies and plans; Rio+20 guidance and institutional structure for environmental management. After that, he continued his discussion on the major driving forces for implementation of REDD+ and REDD+ strategies. He explained that the forests in Myanmar have a great potential for carbon sequestration as it covers 46% of the total land area while at the same time the carbon emission from forestry sectors was the highest among the emission sectors in Myanmar with CO₂ emission of nearly 40 million tons. He highlighted that finding out the major drivers of deforestation and forest degradation has been played crucial role for not only sustainable forest management but also reducing green house gas emission and he discussed the drivers of deforestation in forestry sector and outside forestry sector based on the research findings.

Next, he talked about why and how REDD+ programme should be implemented in Myanmar. In this portion, he explicated the requirements for REDD+ implementation, initiatives of REDD+

and consultation of the development of REDD+ readiness roadmap in Myanmar. He highlighted that Myanmar is eligible to reduce deforestation and enhance carbon stocks from all five activities of REDD+. He also pointed out that Myanmar needs a lot of political supports and legislation for implementation the REDD+ activities packages successfully and sustainability within the sustainable forest management. Then he explained that it was now in the initial phase of REDD+, followed by the development of national roadmap and action plan and the next step would be implementing the kinds of pilot projects with the support of some partners. Moreover, he explained that the design of MRV system was being tried to modify and also for the benefit distribution. He shared the institutional arrangement of REDD+ task force and potential REDD+ activities including indicators and strategies.

Finally, he discussed about the future plan that as the targets of REDD+ was beyond the carbon stock, adding consideration of the biodiversity conservation, the potential priority areas of the pilot project would be in watershed area, key biodiversity areas, corridors (northern and western forest complex), mangrove & coastal areas and areas vulnerable to the high risk of natural disaster. Then, he again explained the target of the forests (PFE) formation under national forest management plan and he concluded

that REDD+ activities were being tried to extend throughout the country to support the achievement of national forest management plan.

Discussion

The following discussions are found under this session.

1. Dr. I Wayan Susi Dharwawan asked three questions to the presenters.

The first question goes to Dr. Hwan-Ok Ma to explain the differences between the usual program and super observed program which is expressed in Dr. Ma's presentation.

Dr. Hwan-Ok Ma replied the question that under current REDD+ program, if we scrutinize the demand and supply of carbon market, the demand was lower than the supply. So, this condition should be modernized in super action program by emphasizing market development to be balanced the demand and supply and we should find out market stability and development. He explained that this was why he mentioned super action program in his presentation.

The second question was for Dr. Nobuya Mizoue. Dr. I Wayan Susi Dharwawan asked that which system was better for sustainable forest management by comparing MSS and logging by using RIL method.

Dr. Nobuya Mizoue gave suggestion on that question that low ecological impact was found in logging by using MSS and it can reduce the damage more by using elephants in logging. So, he supposed continue using MSS in Myanmar.

The third question was the request to Mr. Timothy Boyle to know the major difficulties or challenges while implementing UN-REDD Programme in 16 Asian countries.

Mr. Timothy Boyle answered that the major problem is "people". He recalled and gave some examples of the problems relating to or caused by the people.

2. Next, U Soe Win Hlaing .proposed to translate facts and reports relating on REDD+ program and to distribute them to the grass root level, NGOs, other line department for capacity building.
3. U Tint Swe agreed on that suggestion and he will report that matter to Director General.
4. Dr. Thaug Naing Oo, also, expressed that he agreed on that suggestion. He discussed on current activities that as one of the objectives of REDD+ project was the awareness raising, REDD+ project office were now trying to translate English version to Myanmar version relating on REDD+

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- activities, technical and general paper. General introduction of REDD+, REDD+ road map and others have been already distributed by Myanmar Language to the regional level and also in the workshops. Moreover, articles which express REDD+ up to date information have been written through Forest Journal. Likewise, for example, SPECTRUM and POINT were also trying to translate Myanmar language and some other languages; Kachin, Kayar, etc. He said that we were trying and will try to continue to translate the reports/ books from English to Myanmar and other native languages for races in Myanmar more and more.
5. Dr. Hwan-Ok Ma added his view that he has seen several reports of REDD+ by English and Myanmar language through websites and the office. In addition, he was very appreciating for REDD+ facebook page of Myanmar and he said it effectively works to share information national wide and worldwide. He then give comment on REDD+ program that it was time to adopt REDD+ strategies and he urged to continue to show the achievement.
 6. First of the discussion, U Bo Ni asked a question, “Is it necessary to define a new definition of forest under REDD+ program?”
 7. Mr. Timothy Boyle replied that it is not necessary to define a new definition of forest under REDD+ program.
 8. Dr. I Wayan Susi Dharwawan shared his experience and suggested to add some limit in cutting and schedule in logging to reduce the damage.
 9. Dr. Toe Toe Aung raised a question to Dr. Hwan-Ok Ma to know the reason of decreasing carbon credits and to Mr. Timothy Boyle to know the guidelines for next stage of REDD+ results-based payments.
 10. Dr. Hwan-Ok Ma explained about the market difference and price for carbon credits and he discussed that we should try to develop carbon market and need to discuss and to get agreement for the parameters and differences relating on carbon credits among carbon trading countries.
 11. Mr. Timothy Boyle answered that UN-REDD program was different from REDD+. UN-REDD is not market-base system. This is a program to improve

- capacity of countries through result-based payment under UNFCCC. So, it is need to find out what UNFCCC guide and address it.
12. Daw Naw Ei Ei Min talked about her NGO cooperation in capacity building and thanked for getting some information from workshop and she requested that she would like to know the plan for fulfillment of REDD+ target and development of National Land Use Policy.
 13. Dr. Thaug Naing Oo pointed out the objectives and outline of forest policy and REDD+, first. Then he explained that the basic objectives of forest policy, REDD+ program and land use policy are in the same nature, so, we will harmonize them and implement the work schedule and target in cooperative way.
 14. U Myint Kyaw discussed about the importance of watershed area and appreciated REDD+ activities in watershed area and he strongly supported the REDD+ activities.

SESSION III

REDD+ MRV AND REL/RL

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Dr. Nobuya Mizoue, Professor of Kyushu University, Japan chaired the session called REDD+ MRV and REL/RL under this session, the four topics were presented by the speakers as follow:

- a. Establishment of Forest Reference Emission Level (FREL) in Indonesia by Dr. I Wayan Susi Dharwawan, AFoCO, Indonesia;
- b. Carbon assessment for REDD+ : Using airborne LiDAR as an effective way for forest carbon monitoring in Cambodia by Dr Tetsuji Ota, Kyushu University, Japan;
- c. Identifying drivers of deforestation and developing reference emission level for REDD+ in Peninsular Malaysia by Dr. Ismail Hj. Parlan, FRIM, Malaysia; and
- d. Creating enabling policies and strategies for full and effective participation of stakeholders in REDD+ by Dr. Maung Maung Than, National Coordinator, RECOFTC.

(1) Establishment of Forest Reference Emission Level (FREL) in Indonesia by Dr. I Wayan Susi Dharwawan, AFoCO, Indonesia

Dr. I Wayan Susi Dharmawan, Project Manager, AFoCO, presented the paper on the title of “Establishment of Forest Reference Emission Level (FREL) in Indonesia”. In his presentation, he mentioned about FREL (Forest Reference Emission Level) in Indonesia. He said that the major source of GHG in 2000 emission was from LULUCF (46%), followed by energy sector (24%), and the FREL (Forest Reference Emission Level) could be calculated from the calculation of emission. Next, he shared the development of the Indonesian FREL that was developed by experts from the cross-ministerial agencies and organizations through “a transparent scientific-based participatory process”. He explained the two activities such as deforestation and forest degradation which include in the construction and he highlighted that above ground biomass (AGB) and soil in peat land, and CO₂ were the pools and gas included in FREL construction.

Then he continued on FREL background that FREL was established from forest historical data, taking into account the trends, starting dates, availability and reliability of historical data, and the length of the reference period that sufficient to capture policy dynamics and impacts during that period. He also



shared the several procedures which were applied for FREL establishment, namely: determining of reference period; reference emission calculation; emission calculation from deforestation and forest degradation; emission calculation from peat decomposition; and uncertainty calculation. He again shared the challenges that faced in the establishment of FREL in Indonesia such as: harmonization of land categories definition; improvement of data source; development of local emission factor; estimation of fired area; enhancement of QA/QC system; capacity of human resource at subnational level. In the last part of his presentation, he stated that AFoCO supports for ToT on remote sensing application for forest resource assessment for technical staff from representative Forest Management Unit/ KPH.

(2) Carbon assessment for REDD+ : Using airborne LiDAR as an effective way for forest carbon monitoring in Cambodia by Dr Tetsuji Ota, Kyushu University, Japan



Dr. Tetsuji Ota, Kyushu University, presented the paper titled “Carbon assessment for REDD+: Using airborne LiDAR as an effective way for forest carbon monitoring in Cambodia”. He shared the knowledge of developing an empirical model to estimate above-ground carbon density with variables derived from airborne Light Detection and Ranging (LiDAR) in tropical seasonal forests in Cambodia. He said that his team tested the applicability of variables used for estimating above-ground carbon density. He then mentioned that above-ground carbon density was regressed against variables derived from airborne LiDAR and three single height variable models were developed along

with a canopy density model and three other models combining the canopy height and canopy density variables. He also stated forest type influenced on the model accuracy and the best model was obtained using the single MCH model ($R^2 = 0.96$). Moreover, he explained that the relationship between MCH and above-ground carbon density was being consistent under the different forest types. He concluded that the above-ground carbon density is accurately estimated using MCH derived from airborne LiDAR without considering forest type in tropical dry forest and pulse density does not affect the accuracy hence, lower pulse is better in terms of cost.

(3) Identifying drivers of deforestation and developing reference emission level for REDD+ in Peninsular Malaysia by Dr. Ismail Hj. Parlan, FRIM, Malaysia

Dr. Ismail Hj. Parlan, FRIM, Malaysia, presented the paper titled of “Identifying Drivers of Deforestation and Developing Reference Emission Level for REDD+ in Peninsular Malaysia”. Firstly, he mentioned that the increasing human population and the growing economy were often associated to various environmental disturbances which have been altering the natural earth ecosystem as Malaysia is a developing nation. Deforestation was more caused by the need of more space for numerous land development activities. Then, he discussed that Indonesia had made the forest reserve of 1.5 million ha in the state of Pahang but deforestation was mainly occurred in non-forest reserve areas, in particular state land forests. So, he highlighted that identifying drivers of deforestation is crucial to assist future development and help to construct appropriate land use policies that guarantee sustainability of environment and it is also in-line with the efforts to combat climate change issue. He mentioned that it is in-line with REDD+ which the first “D” was stand for the Deforestation which is needed to be assessed and drivers need to be identified, too. Next he explained the study in Pahang area. The Landsat-TM



and SPOT-5 satellite images between years 1990 and 2010, with 5 years interval were used to identify the drivers and the post-classification changes detection on the images were conducted. Moreover, he explained that forest covers and land use classes to assess the rate of deforestation based on permanent changes of land use occurred within the periods and also the Change matrix analysis were carried out to determine the drivers. Based on this, he explained deforestation drivers in Pahang period by period. He finally expressed that the information will be used for the development of reference emission level (REL) in REDD+ implementation at the sub-national level.

(4) Creating enabling policies and strategies for full and effective participation of stakeholders in REDD+ by Dr. Maung Maung Than, National Coordinator, RECOFTC



Dr. Maung Maung Than, RECOFTC National Coordinator, presented about the paper of “Creating enabling policies and strategies for full and effective participation of stakeholders in REDD+”. He firstly explained that a roadmap of REDD+ comprised of six components which state the REDD+ Readiness activities and the stakeholder consultation and participation is essential for ensuring effective implementation of REDD+ activities. After that he highlighted the importance of participation in Myanmar Forest Policy. He expressed that participation is like an imperative guiding sustainable management of forests in Myanmar

Forest Policy. Besides, he also mentioned that understanding on core values of participation was important for policy makers in order to ensure effective participation. Moreover, he highlighted that the stakeholders should recognize all the core values; mutual understanding, full participation, inclusive solutions and shared responsibility to get the goal of effective participation. He said that the challenges experienced in promoting local participation in formulation of policy and strategy should not be forgotten. He also stated that the key factors in contributing to effective participation of stakeholders were sharing information, consultation with relevant stakeholders,

letting stakeholders to involve and collaboration for common goal and empowering. He concluded that the policy and strategy reflecting key points mentioned will lead to the full and effective participation of all stakeholders in implementation of REDD+ in Myanmar.

Discussion

1. Mr. Timothy Boyle pointed out that based on Dr. I Wayan Susi Dharmawan's presentation, Indonesia argued that the only significant carbon pool is above ground biomass, but based on Dr. Ismail Hj. Parlan's presentation, above ground biomass showed 79% while the belowground biomass and soil showed 19% and 0.01%, respectively in Malaysia. He asked the reasons and also he discussed on the defining deforestation and urged to use up to date data for researches.
2. Dr. Ismail Hj. Parlan from Malaysia explained that carbon pool percentage will be high in forest because deforestation was mainly occurred in non-forest reserve areas and he discussed about land use changes which are the major challenges in study area.
3. Dr. I Wayan Susi Dharmawan from Indonesia answered that below ground biomass is a portion of carbon pool also, but they could emphasize on measuring above ground biomass and soil in peat land in the project area because of some difficulties to adopt the IPCC formula now and difficulty to measure below ground biomass when the project started and they are trying to move forward. He also explained about the data for assessing deforestation.
4. Mr. Hamdan Bin Omar raised a question to know the format of airborne LiDAR and Dr. Tetsuji Ota briefly explained the format he applied. Then, the participants actively discussed on the LiDAR and forest degradation measurement.

SESSION IV

CASE STUDY FOR REDD+



The chairman of this session was U Bo Ni, Director of Watershed Management Division, Forest Department, Myanmar. The followings are the main themes that were presented by the speakers:

- a. Use and Issues of Remote Sensing for Forest Carbon Monitoring at A National Level by Dr. Yasumasa Hirata, FFPRI;
- b. UNDP's experiences in REDD+ in Myanmar by Daw Khin Hnin Myint, UNDP, Myanmar and
- c. Analysis on deforestation and forest degradation in Myanmar in the context of REDD+ by Mr. Yukio Wada and Mr. Mitsuzuka, Asia Air Survey Co. Ltd, Japan.

(1) Use and Issues of Remote Sensing for Forest Carbon Monitoring at A National Level by Dr. Yasumasa Hirata, FFPRI

Dr. Yasumasa Hirata, FFPRI, made a presentation on the paper of "Use and issues of remote sensing for forest carbon monitoring at a national level in REDD+ implementation". First of all, he explained the role of REDD+ in reducing the GHG emission in the post-Kyoto climate change negotiation and the measurement, reporting and verification (MRV) of forest carbon changes. He highlighted that MRV which is a cornerstone of any national REDD+ should follow the national requirements and also be adapted to the country's specific conditions like vegetation, economy, culture, institution and/or the deforestation/forest degradation drivers. He also made a suggestion that a REDD+ participating country should prepare the forest carbon change MRV system prior to a full implementation of REDD+ so as to promptly estimate the carbon budget and its historical trend for the reference level.

Then, he introduced the project which was conducted in Cambodia, Peninsular Malaysia and Paraguay with the aim to develop a method for estimating forest carbon stocks at national or sub-national level. He expressed that Landsat-5, 7 and 8, SPOT-4 and 5, ALOS/AVNIR-2 data were



Presentation of Technical Paper “Use and issues of remote sensing for forest carbon monitoring at a national level”, made by Dr. Yasumasa Hirata, FFPRI, Japan

used as a time-series and the methods were developed to reduce the effect of seasonality in tropical seasonal forest, the effect of clouds in tropical rain forest, and classification method of dry forest. He explained that the object-based approach was used for classification by forest type and disturbance degree after reducing the effects. The latest year classification maps were used as base maps and the retrospective approach was used to analyze past satellite data due to the limitation of ground truth data. Finally, he explained that forest carbon stock change at a national level could be accounted by multiplying forest carbon stock per unit area by forest type and disturbance degree obtained from ground-based

inventory by the corresponding area from the classification results. Then the following conclusions were given in his presentation;

- In REDD monitoring, not area change of forest but carbon stock change of forest is required.
- The consistency and reliability of a technique serve as a key to the 3rd person review.
- Combination with ground-based inventory is indispensable to estimation of carbon stock and its change.

(2) UNDP's experiences in REDD+ in Myanmar: Indigenous people participation in REDD+ by Daw Khin Hnin Myint, UNDP, Myanmar



Daw Khin Hnin Myint, UNDP Myanmar, gave presentation on a paper entitled, “UNDP’s Experience on REDD+ in Myanmar: Indigenous people participation in REDD+”. She started her presentation with the introduction of her current project. She said that UNDP was currently implementing a project called “Improvement of the quality of life of ethnic minorities in the Naga Area in Myanmar through youth participation in REDD+” in three townships namely Layshi Lahe and Khamti in Sagaing Region. She then highlighted the objectives of the project which were to enhance the awareness of ethnic minorities in REDD+ right based approach and building up their capacity on participatory natural resource management planning process. She then shared the knowledge and

experience on training of the project of CSOs and youth activists with the aim to lead and facilitate to their villages on planning process. She also shared the plan to initiate the project for setting up the REDD+ network at township and national level and establish the communication/information flow among networks. She concluded her presentation by showing her thought that it is a good opportunity to start up to demonstrate/piloting the REDD+ readiness project in order to conserve the existing dense forest in time and reduce the deforestation rate with other alternative approaches and demonstrating the respect of right based approach of ethnic communities in REDD+ readiness process.

(3) Analysis on deforestation and forest degradation in Myanmar in the context of REDD+ by Mr. Yukio Wada and Mr. Mitsuzuka, Asia Air Survey Co. Ltd, Japan



Mr. Naoki Mitsuzuka, Asia Air Survey, presented the paper entitled, “Analysis on deforestation and forest degradation in Myanmar in the context of REDD+”. He discussed on SoFDM (Study on forest degradation Monitoring for REDD+) project in which the objectives were to support activities on the ground, develop satellite image analysis technologies, etc and human resources development with a view to enhancing technology for grasping forest degradation in developing countries that are implementing REDD+ initiatives. He explained the new technical methods for measuring forest degradation. He briefly explained what and how to use the Rapideye satellite, UAV observation, 3D modeling by UAV and forest inventory by using Ricoh “Theta” with double sided fish-eye camera in the study area.

Discussion

The participants made the following discussions.

1. Dr.Hwan-Ok Ma discussed his concerning that in the morning session, Dr. Nobuya Mizoue discussed about the assessment of forest degradation with the calculation of canopy cover % by using crown projection area and land area (closed forest and open forest defined by canopy cover %) and in the afternoon session, Mr. Yukio Wada from Asia Air Survey discussed degradation assessment by using modern technique (by assessing tree canopy, forest condition, forest floor). So, he would like to know any idea or somehow these two ways can harmonize or correlate for effective

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- investigation on degradation.
2. Dr. Yasumasa Hirata added his comment that remote sensing is one way to assess forest carbon change at national level. But one thing we must consider is that if we implement survey (using remote sensing) by dividing forest classes, we can distinguish carbon stock classes from remote sensing data and it will be work well. If not, it will miss some assessment. So, he proposed to divide the forest area into several classes by each forest type because (for example- evergreen forest, we can divide three class; deciduous forest, 2 class, etc.) where are carbon classes.
 3. Dr. Nobuya Mizoue firstly explained that the studies on forest degradation were carried out in Myanmar by his team because of the shortage of research data in this field in former times. Then he discussed that technology is improving year by year and he thought that the new study should be carried out on “a comparative study or the correlation between our method and that new modern technique not only for carbon stock but also for biodiversity”.
 4. Mr. Timothy Boyle raised questions to know which kind of language used in the communication to the local people and information sharing system by internet, Naga, the study site, can get internet access or not. And, for crown cover assessment, searching through website from google, also, is the one way.
 5. Daw Khin Hnin Myint answered that among the multiple native tongues, most are in familiar with the Myanmar language, so Myanmar language is used and the sharing information by internet access is intended only for REDD program to share information about the status.
 6. Dr. Yasumasa Hirata discussed about crown cover assessment that we can get modernized data from websites, but it is inefficient because the data are mosaic and if we use mosaic data, we face signal issue. One method we have to obey for comparing data is that we have to make method consistency for all area in the research.
 7. Dr. Ei Ei Swe Hlaing asked whether local people in Naga Region used shifting cultivation for commercial or subsistence need and she also shared her opinion that if you can show the role of youth to overcome the challenges, it will be useful. Another question to Mr. Naoki Mitsuzuka is to know the most suitable technology for carbon measuring in Myanmar based on experience.

8. Daw Khin Hnin Myint replied that shifting cultivation is used only for subsistence need in Naga area. But in this area, it is very difficult to build their capacity because of their educational status, language and others constraints, so tried to do the best with this situation.
9. Mr. Naoki Mitsuzuka gave his opinion that the method should be selected based on the place, area, forest types, the objectives and the future plan.
10. U Myint Naing from Naga Association of Students asked that which will be the easiest way to communicate indigenous people in Naga region, specifically.
11. Daw Khin Hnin Myint answered that in her study, first, she approached to major important local people in all field in this region, collected the people who are interesting in program, then give training to local people and youth.
12. U Soe Win Hlaing suggested to Daw Khin Hnin Myint to discuss with ICIMOD to develop future activities in Naga region and he suggested to UNDP that it will be useful and effective if we can explain the advanced technology to be easy to know and to give understandable way as the simplest methodology to local people.
13. Daw Naw Ei Ei Min added her opinion to distribute the REDD+ information to be short as article, pamphlet, Myanmar cartoon, newsletter, etc. instead of thick book. Furthermore, she asked the role of women in participation of Naga project activities.
14. Daw Khin Hnin Myint responded the question that among the participants, 10% are girls for doing activities and over 30% are girls in training.

SESSION V

**SUSTAINABLE LANDUSE
MANAGEMENT**



Dr. San Win, Pro-rector of University of Forestry chaired this session. It was composed of two parts in which the first part consisted of four papers and the second part consisted of three papers. Each part was ended with discussion. The topics which were talked by the presenters are as follow:

- i. Institutions for Landuse Management by Dr. Jose A. Puppim de Oliveira, UNU-IAS, Japan;
- ii. Development of National Landuse Policy in Myanmar by U Kyaw Kyaw Lwin, Director of Natural Forest and Plantation Division, Forest Department, Myanmar;
- iii. Land tenure and Landuse Right in Myanmar: How Ancestral and Communal rights can be recognized and protected by U Kyaw Kyaw Lwin, Director of Naural Forest and Plantation Division, Forest Department, Myanmar;
- iv. Zoning Approach for Landuse Management and REDD+ in Myanmar by Dr. Myat Su Mon, Assistant Director of Planning and Statistics Division, Forest Department, Myanmar;
- v. "The role of participatory landuse planning for sustainable forest management": a case study in Myintmoletkhet Key Biodiversity Area, Taninthayi, Myanmar, by U Kyaw Thin Latt, RS-GIS Expert, WCS;
- vi. Enhancing ecosystem services by Dr. Toe Toe Aung, Staff Officer, Watershed Management Division, Forest Department, Myanmar and
- vii. Different types of people-oriented approach in community forestry: opportunities and challenges in Myanmar by Dr. Ei Ei Swe Hlaing, Staff Officer of Forest Research Institute, Forest Department, Myanmar.

(1) Institutions for Landuse Management by Dr. Jose A. Puppim de Oliveira, UNU-IAS, Japan

Dr. Jose A. Puppim de Oliveira presented the paper entitled, “Institutions for Landuse Management”. Firstly, he introduced the definitions of land, land cover, land use and landscape. He explained that land refers to a delineable area of the earth's terrestrial surface, encompassing all biophysical attributes immediately above or below this surface and human alternations of the land use and land cover for food, shelter, and other needs have steadily intensified and expanded worldwide. Again, he highlighted that land use is generally treated as a local issue, but aggregation of the worldwide changes in land use is becoming a significant cause of global environmental changes, such as land degradation, loss of biodiversity and climate change with serious impacts on the society and the ecosystem functioning at all levels. In addition, he explained that initiatives such as REDD+ and others try to make the links between global and local interests in support of sustainable land management.

In his presentation, he presented an institutional analysis of property rights over land to understand land management and its impacts on ecology as well as society, and integration of human needs and ecosystem functioning in land management systems at all levels. His presentation explored the land use change, its cause and consequences,



especially the linkage of land use to global environment challenges in the rural context. Moreover, two cases of the interactions between different institutions and the impacts on land use management were presented. After that, he concluded his presentation with the following statements:

1. Clear property rights over land and the natural resources attached to it, including carbon, are important for avoiding conflicts and successful REDD+ implementation.
2. There are opportunities to use REDD+ to increase the security of the tenure for communities facing insecure land rights.
3. Avoiding support to areas where there are conflicts or unclear property rights can actually leave out the most vulnerable areas to deforestation, where support is most needed.

(2) Development of National Landuse Policy in Myanmar by U Kyaw Kyaw Lwin, Director of Naural Forest and Plantation Division, Forest Department, Myanmar



The presentation on development of national landuse policy in Myanmar was made by U Kyaw Kyaw Lwin, Director of Natural Forest and Plantation Division, Forest Department, Myanmar. In the presentation, he stated that the Government of the Republic of the Union of Myanmar has been recognized the issues related to land, and so, Land Use Allocation and Scrutinizing Committee has been formed by the Union Government to draw and adopt the national land use policy which is in conformity with the situation of Myanmar and contains international best practices; and to carry out land system reforms.

Then he explained the objectives of the National Land Use Policy which are to benefit and harmonize the land use, development and environmental

conservation of the land resources of the State, to protect the land use right of the citizens and to improve land administration system. He also explained that this policy shall concern with all uses of land resources and land use rights of the whole country including rural and urban areas by implementing these objectives successfully. He highlighted that this policy is the guide for the emergence of a new land law including harmonization of existing laws relating to land and their implementation and it shall be guided for the matters which shall be decided by all relevant departments and organizations relating to land use and the right to use land. Finally, he shared the way forward of Land Use Allocation and Scrutinizing Committee to submit the National Landuse Policy to the Union of Government by April, 2015.

(3) Land tenure and Landuse Right in Myanmar: How Ancestral and Communal rights can be recognized and protected by U Shwe Thein, Chair of Land Core Group, Myanmar



U Shwe Thein, Chair of Land Core Group, Myanmar talked about “the land tenure and landuse right in Myanmar: how ancestral and communal rights can be recognized and protected”. The outlines of his presentation were to explain the land tenure and land rights, to know how the draft national land use policy recognize and protect traditional land rights of ethnic nationalities and to share a planned pilot project of Land Core Group relating on a process and methodology to recognize and protect the ancestral lands and communal lands. He explained that the draft national land use policy has recognized and protected the traditional land rights of ethnic nationalities including ancestral land, communal land, rotational fallow taungya practices, the mechanism of traditional conflict resolution, and participation

of ethnic leaders and local community leaders in updating information and conflict resolution of issues related to ancestral land and communal land. Next, he discussed a pilot project idea with an intention to inform the national land use policy implementation, formulation and implementation of national land resource law, strengthening of existing land use regulations, and contributing to township/district land use planning. At the end of his presentation, he discussed that this pilot focuses on participatory land use mapping and planning, ancestral communal land adjudication and registration.

(4) Zoning Approach for Landuse Management and REDD+ in Myanmar by Dr. Myat Su Mon, Assistant Director of Planning and Statistics Division, Forest Department, Myanmar



Zoning approach for landuse management and REDD+ in Myanmar was presented by Dr. Myat Su Mon, Assistant Director of Planning and Statistics Division, Forest Department, Myanmar. First of all, she mentioned the importance of maintaining a precise and evidence based balance between food production, economic development, sustainable use of natural resources and environmental conservation, and ensuring accurate geospatial and socio-economic data and use of software tools to produce valid and relevant spatial plans. Moreover, she explained that national and regional land zoning plans are important means of ensuring

the national development goals and the objectives should be matched with effective land use practices at the local level. She again explained that landscape level zonation in general seeks to match key geophysical characteristics of land, and existing socio-economic conditions with a recommended type of land use based on what is socially and environmentally appropriate within a specific area.

She continued her presentation on the process of promoting effective land use planning by improving the quality of land use information and refining the zoning methodologies used by the Union Government of Myanmar. Her presentation introduced the Forest Department's emerging approach to zoning for land use management, how the national forest monitoring system is being set up and the relationship between these strongly interrelated and complementary processes. She also talked about the pilot study on zoning approach for landuse management for Taungoo, Tharyarwaddy and Bago Districts. In the last part of her presentation, she shared the way forward for landuse mapping and preparing landuse management plan.

Discussion

The participants made the following questions and discussions on the papers:

1. Mr. David Allan from SPECTRUM asked a question to U Shwe Thein that he would love to hear the update or status of ancestor land mapping because he has never seen such kind of map although he has seen hundred of Myanmar's map.
2. U Shwe Thein from Land Core Unit replied that there is no official mapping for ancestor land based as a single map on his knowledge. He also suggested that it will be good if respective land management departments and different line department could help to confirm the status. CSOs and NGOs are initiating to implement participatory land use mapping project in which ancestor lands will be included in the map.
3. Secondly, Ms. Khin Hnin Myint, UNDP asked about collective management to Dr. Jose A. Puppim de Oliveira, UNU-IAS and asked the site where the pilot project will conduct to U Shwe Thein, Land Core Unit. She also suggested that project should be implemented with the cooperation of line ministries.
4. For this question, U Shwe Thein from Land Core Unit answered that the project site has not been decided yet and it is still discussing on that issue and suggestions and guidelines from the respective ministries at the same time. He also stated that it is needed to establish coordination mechanism to learn and support from all organizations that have similar experience.
5. Mr. Timothy Boyle, UN-REDD programme also recommended on the discussion about carbon right that was mentioned in Dr. Jose A. Puppim de Oliveira's presentation. He explained that if community in the country (eg. Myanmar) has community forests and is participating in a national REDD+ Programme under the UNFCCC, the carbon right is relevant because of how does REDD+ mechanism work. This country (Myanmar) reports results – how much emission reductions to the UNFCCC and subsequently receives results based funding. Therefore it is self-evident that this country (Myanmar) has this right. So, under REDD+ mechanisms, carbon rights are really relevant. Another thing he explained is that if anyone or any community wants to sign benefit according to carbon, measuring carbon is very expensive.
6. Next, Dr. Hwan-Ok Ma added discussion regarding carbon market, land tenure and customary right based on his experience and raised a question regarding collective management to Dr. Jose A. Puppim de Oliveira.
7. Regarding on collective management, Dr. Jose A. Puppim de Oliveira replied that it is important and government can promote specific kind of properties right arrangement and cooperative or collective practice is more effective when managing large area. In addition, he clarified about the carbon right and carbon voluntary market.

(5) "The role of participatory landuse planning for sustainable forest management": a case study in Myintmoletkhet Key Biodiversity Area, Taninthayi, Myanmar by U Kyaw Thin Latt, RS-GIS Expert, WCS



U Kyaw Thin Latt, WCS briefed on the role of participatory landuse planning for sustainable forest management: a case study in Myintmoletkhet Ley Biodiversity Area, Taninthayi, Myanmar. At the beginning of the presentation, he highlighted the importance of biodiversity conservation, community participation and empowerment to local communities for long term success in natural resources. He also presented that participatory landuse planning in village level plays important role in decentralization and bottom up landuse planning should be conducted before any protected area establishment.

Then he continued on the case study which has been conducted in

Myintmoletkhet Key Biodiversity Area (MKBA) in Taninthayi region where the boundary of that area connects with the internationally well-known forest complex namely Western Forest Complex (WEFCOM) and Kaeng Krachan National Park in western Thailand.

Altogether this region becomes a large forest complex that must be given high priority for transboundary conservation actions between Myanmar and Thailand. He explained that WCS has started to engage with local people and stake holders since 2013 and conducted village consultation process and village development zoning process in the core area of the MKBA. He presented the result of participatory landuse planning which shows very positive for the sustainable forest management and essential of participatory landuse planning in the establishment of biodiversity conservation areas. At the end of the presentation, he recommended that:

1. Village consultation and village used zoning process should be conducted at the KBAs;
2. Traditional village boundary and bottom up natural resource development landuse planning

- should be considered in national landuse policy formulation;
3. Participatory landuse planning and community base natural resource management should be used in establishment and management of
 4. Community Managed Areas like Kaser Doh Wildlife Park and Ler Nu Htee National Park should be recognized by the government.

(6) Enhancing ecosystem services by Dr. Toe Toe Aung, Staff Officer, Watershed Management Division, Forest Department, Myanmar

The paper entitled “Enhancing ecosystem services” was presented by Dr. Toe Toe Aung, Staff Officer of Watershed Management Division, Forest Department, Myanmar. He started his presentation with the introduction of ecosystem services. He then highlighted that ecosystems have changed more rapidly and extensively over the past 50 years, 15 out of 24 of the ecosystem services (ca. 60 %) are being degraded or used unsustainably. Furthermore, he mentioned that both of vulnerability to the 2 billion people in dry regions and global life support system are resulted from degradation of ecosystem services. He also explained that even though the global, regional and national strategies are being implemented such as Strategic Plan for Biodiversity (2011-2020) and Aichi Biodiversity targets, REDD+ program, Satoyama initiatives, efforts are not sufficient to achieve enhancement of ecosystem services and additional actions are necessary.



He continued on the case of Myanmar by sharing activities which have been conducted to sustain ecosystem services since decades and major national policies and frameworks; Myanmar Forest Policy (1995), National Environment Policy (1998), National Forestry Sector Master Plan (2001-02 to 2030-31), Dry Zone Greening Comprehensive Plan (2001-02 to 2030-31) and National Biodiversity strategy and Action Plan (2011-2031). He explained the selected examples for ecosystem services restoration in

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Myanmar; dry and delta area (Mount Popa), dry zone, and delta region (Ayeyarwady delta). Moreover, he mentioned that forest ecosystems of Myanmar provide approximately 7.3 million USD annually while the annual budget allocation on forestry services was from about 15.5 to 26 million USD during 2008-09 and 2010-11 fiscal years.

After that, he explained constraints to overcome to achieve national prospect on Enhancing ecosystem services such as no indicators to measure effectiveness of efforts, insufficient

investment on ecosystem restoration and management activities. Then, he supposed that conservation programs and communication, education and public awareness (CEPA) program should be effectively implemented for enhancing ecosystem services. Then he concluded his presentation by highlighting the importance of resource mobilization and synergistic efforts to ensure sufficient resources for effective ecosystem services management and restoration activities.

(7) Different types of people-oriented approach in community forestry: opportunities and challenges in Myanmar by Dr. Ei Ei Swe Hlaing, Staff Officer of Forest Research Institute, Forest Department, Myanmar



Dr. Ei Ei Swe Hlaing, Staff Officer of Forest Research Institute, Forest Department, Myanmar, briefed on “Different types of people-oriented approach in community

forestry: opportunities and challenges in Myanmar”. In her presentation, first, she presented a brief introduction of community forestry in Myanmar.

She again clarified that this approach encourages active participation of local people in forest management activities as a means to provide basic-needs for forest products such as fuelwood, agricultural tools and timber and to stabilize the environment. Furthermore, she shared the information that around 49061.53 hectares of forest is currently under the control of about 30956 community forest user groups.

She explained different types of people-oriented approach in community forestry in Myanmar according to diverse ecosystems of the country and socio-cultural aspects of different ethnic groups. In her study, she analyzed opportunities and challenges of different types of approach in Shan State, dry land, Ayeyarwady delta, farm land (reserved forest) and she briefed on joint bamboo forest management. Finally, she discussed that eventhough community forestry (CF) is significant as a livelihood option for local people, the outcomes are not assured because of some uncertainties even if members actively participate in CF, and therefore, long term capacity building, optimizing economic return, timely implementation of sequential activities for establishment and forming a new division under Forest Department is crucially important for future development.

Discussion

The presentations were raised by the following discussions.

1. Dr. Ismail Hj. Parlan, FRIM asked a question to Dr. Toe Toe Aung of Forest Department about the strategies or activities to increase permanent forest estate in Myanmar.
2. Then, Dr. Toe Toe Aung answered that the total target area of permanent forest estate of Myanmar is 40% total land area in which 30% will be reserved forest and protected public forest areas and 10% will be protected areas. He also explained that the activities to extend/notify as reserved forest, protected public forest and protected area have been done by the Forest Department in coordination with International Organizations.
3. Dr. Ma added his suggestion to find out fund to implement transboundary conservation project at Thanintharyi Region and invited WCS as an implementing partner.
4. Next, U Maung Maung Kyaw, UNOPS discussed on behalf of UNOPS that UNOPS has an interest to work in REDD+ field. He mentioned that important of people participation and recommended to use mass media to get people participation.

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5. After that, U Soe Win Hlaing raised a question to WCS that “How does WCS cooperate with TNRP on VCP-VD2 process? Is TNRP success or not and What is the opinion of WCS on TNRP?”. He also raised a question to Dr. Ei Ei Swe Hlaing “Are there any idea regarding new market led approach for community establishment and the possibility way for market orientation approach?”
6. For his question, U. Kyaw Thin Latt, WCS replied that WCS has been closely working with TNRP. TNRP has 25 villages around reserved areas and will conduct VCP-VD2 in those villages.
7. Afterward, Dr. Ei Ei Swe Hlaing answered U Soe Win Hlaing’s question that “It is possible to use market led approach but research should be conducted to know value changed process after clarify potential market enterprise products. Moreover, the coordination is needed among stakeholders. Currently FRI is carrying out market research with RECOFTC.
8. For the last, Mr. David Allan from Spectrum asked suggestion for possible reconsideration of boundaries of Protected Areas in Myanmar based on community based land mapping and how to do that process and if there were some shortcomings in the original practice to area decoration process, how will it be done and which area is possible for piloting?
9. Mr. Kyaw Thin Latt, WCS, responded the above question that there are 43 notify and proposed Protected Areas in Myanmar and boundary demarcation had been done since British Colonial time. He recommended to do VCP-VD2 and the conflict will be reduced after doing VCP-VD2 because people know their right. He suggested to carrying out pilot project first in Nat Ma Taung National Park.

SESSION VI

FOREST TENURE, SAFEGUARDS AND GENDER CONSIDERATION FOR REDD+ AND SFM IN MYANMAR

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This session was chaired by Dr. Jose A. Puppim de Oliveira, UNU-IAS, Japan. In this session, five presenters talked about their experiences in specific field and the followings are the main themes that were presented by the speakers:

1. The prospective role of AFoCO Regional Education and Training Center (AFoCO RETC) for capacity development on sustainable forest management under AFoCO Landmark Program in ASEAN Region by Dr. Lee Seong Han, Field Coordinator, AFoCO Landmark Program, Korea;
2. Development of social and environmental standards for REDD+ program in Myanmar by U Pyi Soe Aung, Range Officer of Wildlife Division, Forest Department, Myanmar;
3. Gender consideration in REDD+ and sustainable landuse practices in Myanmar by Daw Naw Ei Ei Min, Director, POINT;
4. Forest Carbon Mapping in Myanmar by U Aung Aung Myint, Assistant Director of Planning and Statistics Division, Forest Department, Myanmar; and
5. For Enhancing Social Safeguards Effectively in REDD+: A Comparison of three major REDD+ Safeguard initiatives through existing literatures by Dr. HYAKUMURA Kimihiko, Associate Professor, Kyushu University, Japan. Encouragement to all themes under this session was done through discussions.

(1) The prospective role of AFoCO Regional Education and Training Center (AFoCO RETC) for capacity development on sustainable forest management under AFoCO Landmark Program in ASEAN Region by Dr. Lee Seong Han, Field Coordinator, AFoCO Landmark Program, Korea

Dr. Lee Seong Han presented the paper entitled the prospective role of AFoCO Regional Education and Training Center (AFoCO RETC) for capacity development on sustainable forest management under AFoCO Landmark Program in ASEAN Region. He started his presentation with general introduction of Asian Forest Cooperation Organization (AFoCO) that it was proposed by Korean government in 2009 at the “ASEAN-ROK Commemorative Summit” as a legally binding international organization dealing with forestry related issues in Asian region. He mentioned AFoCO as an action-oriented organization, which has been pursuing to translate sound forest policies and proven technologies into action with a mission to rehabilitate degraded forest land and to prevent deforestation and forest degradation for the sustainable forest management in least developed and developing countries. Furthermore, he presented the cooperation projects. Then he discussed AFoCO Landmark Program which the aim of the program is to improve forest practices and human capacity development and also contribute to sustainable socio-economic development



of local communities by promoting public awareness and participation on conservation and management of forest ecosystem. He again mentioned that the priorities of implementing this program are Cambodia, Lao PDR, Myanmar and Vietnam. Finally, he briefly explained about the implementation of project 1 - Establishment of regional education and training center (AFoCO RETC) in Myanmar under AFoCO Landmark Program and he introduced the tentative education and training programs of AFoCO RETC in Myanmar.

(2) Development of social and environmental standards for REDD+ program in Myanmar by U Pyi Soe Aung, Range Officer of Wildlife Division, Forest Department, Myanmar



U Pyi Soe Aung, Range Officer of Wildlife division, Forest Department, Myanmar talked about the development of social and environmental standards for REDD+ program in Myanmar. He first emphasizing on the general introduction of National REDD+ Readiness Roadmap and REDD+ Social and Country Environmental Safeguards System. He then explained the social and environmental standards for Myanmar which is comprised of the following “seven principles” together with a set of 27 criteria and 59 indicators to ensure the effective implementation of REDD+ programs as well as to avoid possible risks related to the implementation of REDD+;

Principle # 1: The REDD+ program recognizes and respect rights to lands, territories and resources.

Principle # 2: The benefits of the REDD+ program are shared equitably among all relevant rights holders and stakeholders.

Principle # 3:The REDD+ program improves long-term livelihood security and well-being of Indigenous Peoples (ethnic groups) and local communities with special attention to the most marginalized and/or vulnerable people.

Principle # 4: The REDD+ program contributes to good governance and sustainable development.

Principle # 5: The REDD+ program maintains and enhances biodiversity and ecosystem services.

Principle # 6: All relevant stakeholders participate fully and effectively in the REDD+ program.

Principle # 7: The REDD+ program complies with applicable local and national laws and international treaties, conventions and statement regulations.

(3) Gender consideration in REDD+ and sustainable landuse practices in Myanmar by Daw Naw Ei Ei Min, Director, POINT

The paper entitled, “Gender consideration in REDD+ and sustainable landuse practices in Myanmar” was presented by Daw Naw Ei Ei Min, Manager, POINT. She mainly emphasizing on policy of shifting cultivation, causes of unstable or pioneering shifting cultivation and the role of women in sustainable forest management. She discussed that the main livelihood of indigenous people in Myanmar is shifting cultivation, taungya farming and it has not been officially recognized as sustainable land use practices and supported in Myanmar to date despite its traditional and continuing importance. After that she continued on case studies in the Taung Nyo mountain range in Western Bago Division and Kaanpetlet Township in Southern Chin State. She highlighted that these case studies demonstrate the diversity and strengths of Myanmar’s shifting cultivation systems and the need for more research on shifting cultivation systems throughout the country in preparing for REDD+, as well as for policy that recognizes and supports existing systems while providing help in improving and supplementing traditional strategies in response to new pressures.

Furthermore, she explained that although indigenous women are the primary



forest users of the natural forest and are affected by environmental degradation, there is minimal participation of women in forest resource management at the community level based on case studies. She also found that indigenous women have no decision-making power and their participation in community committees is absent because their voices are ignored and rejected by men because of their gender. Therefore, she highlighted that the role of indigenous women and their contribution must be recognized in order to promote forest conservation and REDD+ implementation.

(4) Forest Carbon Mapping in Myanmar by U Aung Aung Myint, Assistant Director of Planning and Statistics Division, Forest Department, Myanmar



Countries participating in REDD+ need to prepare to report on their forest carbon stocks changes. Satellite Remote Sensing and forest inventories are key tools (because it is the only practical means to cover the large area of forest for national level monitoring in developing countries) and data sources for monitoring but developing countries needed for reporting to the United Nations Framework Convention on Climate Change (UNFCCC) vary considerably. The agreement states that these developing countries should collectively aim to slow, halt and reverse forest cover and carbon loss, thereby addressing the five activities of REDD+ (deforestation, forest degradation, conservation, sustainable management

of forest and enhancement of forest carbon stocks). The national monitoring system should use a combination of Remote Sensing and ground based forest carbon inventory approaches for measuring forest area changes and forest carbon stocks and changes.

Furthermore, countries may adopt a step-wise approach to implement REDD in three phases. Phase I involves development of national strategies or action plans, policies and measures, and capacity-building. For Phase II countries have to demonstrate that through their monitoring system their demonstration activities are result based, while for Phase III countries are requested to address all requirements of monitoring, reporting and verification (MRV) as stated in Decision 1/CP.16. MRV should be done in accordance with requirements from the Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines and the five reporting principles of consistency, comparability, transparency, accuracy and completeness. According to IPCC (2006) guidelines estimations of changes in carbon stocks need to be reported for five carbon pools in forests: above-ground biomass, belowground biomass, deadwood, litter, and soil organic matter.

Since an agreement on REDD+ has been reached, there is the need to develop recommendations for developing countries and to help the international community in setting investment priorities for implementing national forest monitoring systems (NFMS) for MRV of GHG emission (FAO, 2011). That

is why at present Myanmar is under development of national strategies or action plans, policies and measures, and capacity-building, especially related to NFMS and Carbon estimation methodologies.

(5) For Enhancing Social Safeguards Effectively in REDD+: A Comparison of three major REDD+ Safeguard initiatives through existing literatures by Dr. HYAKUMURA Kimihiko, Associate Professor, Kyushu University, Japan

Dr. HYAKUMURA Kimihiko presented on “For enhancing social safeguards effectively in REDD+: A Comparison of three major REDD+ Safeguard initiatives through existing literatures”. In his presentation, he mainly discussed on two parts; land and forest use right to local people and REDD+ and comparison of three major REDD+ Safeguard initiatives. In the first part, he explained the devolution movement of forest management to local people step by step, the actors involved forest management in Tropics. He mentioned that the elements of forest management for securing local right are the development of legal system of forest use right for forest dependent people and the good forest governance for that legal system. In the



second part, at first, he briefed on what can achieve under REDD+, uncertainty of REDD+ implementation and the safeguard of REDD+ under UNFCCC. Then he discussed the three major

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initiatives of Strategic Environmental and Social Assessment (SESA), UN-REDD's Social and Environmental Principles and Criteria (SEPC) and REDD+ Social and Environmental Standard (REDD+ SES) by a comparative way. After that, he highlighted the following comparison of social aspects in three major safeguard initiatives:

- REDD+SES covers a wider range than the others;
- Coverage of SEPC and REDD+SES are indeed similar;
- REDD+SES note the phrases “of indigenous peoples and local communities” and “with special attention to women and marginalized and/or vulnerable people” in most criteria;
- Some criteria targeted in REDD+SES and SEPC, like equal benefit-sharing among stakeholders, participation of stakeholders and good governance, cannot be seen in SESA.

Discussion

The participants raised the questions and give suggestions and discussions on papers as follow.

1. Mr. Timothy, UN-REDD programme raised question to U Pyi Soe Aung of Forest Department that “How will Myanmar ensure that the system

of safeguards currently being developed will be consistent with the CANCON Safeguards?”.

2. U Pyi Soe Aung, Forest Department answered that the current REDD+ Social Environmental Safeguards is the project level initiatives, but it follows the principle of UNREDD Social Environmental Principles and Criteria, as well as the REDD+ SES. But we would like to have the SES which is applicable at the local level so that we integrated local level issues and challenges in the current draft national SES.
3. Dr. Thaung Naing Oo, added some comments regarding the development of the SES. He mentioned that it is an initial state and at the project level it is basic consideration for the upcoming National level UNREDD programme. This is the reason for reviewing available SES references. Myanmar SES should be applicable in the field. Myanmar SES has been developed with many working groups and disseminated through website, workshops and stakeholders consultation.
4. After that, U Nyein Chan suggested to Daw Naw Ei Ei Min that according to his research in 3 sites – Laos, the Bago Yoma and Southern Chin State, there should be different potentials to promote their livelihood.

5. Then, Dr. Ismail Hj. Parlan, FRIM asked Daw Naw Ei Ei Min that how to control shifting cultivation and degraded parts?
6. Daw Naw Ei Ei Min, POINT responded the questions that some communities are distance from other in a way that they move deeper into the forest because they cannot speak Burmese and they request one who can speak to help communicate with outsider. These communities need to upgrade their knowledge to continue their livelihoods with environmentally friendly manner. For Taung-ya system, she answered that some communities have good shifting practices. However some communities cannot continue using their good practices due to migration and advanced education and loss of traditional knowledge. So, it is needed to help and support that portions with effective ways based on researches.
7. Next, U Soe Win Hlaing asked Dr. Lee Seong Han that “Is there any AFoCO-RECT training schedules?”
8. Dr. Lee Seong Han replied that AFoCO-RECT project piloting training will be conducted in next year and he also shared the information of restoration model of Korea.
9. Last, Dr. Yasumasa Hirata, FFPRI asked that what kind of allometric carbon equation is used for forest carbon mapping in Myanmar.
10. For this question, U Aung Aung Myint, Forest Department answered that FAO guideline default formula is used for country level carbon mapping. For reserve or local level, allometric equation developed by Dr. Myat Su Mon is used.

SESSION VII : PANEL DISCUSSION



Panel discussion was done with the moderation of Dr. Hwan-Ok Ma, ITTO Projects Manager in order to find out the way forward for development of REDD+ in the context of sustainable land use and forest management in Myanmar. The panelists are;

1. Dr. Nobuya Mizoue, Professor, Kyushu University, Japan,
2. Dr. Jose A. Puppim de Oliveira, United Nations University, Japan,
3. Mr. Timothy Boyle, Regional Coordinator, UN-REDD programme,
4. Dr. Thaung Naing Oo, National Project Manager of ITTO REDD+ project, Director of Forest Research Institute, Forest Department, Myanmar,
5. Dr. Myat Su Mon, Assistant Director, Forest Department, Myanmar,
6. Dr. Ismail Hj. Parlan, Project manager, FRIM, Malaysia and
7. Dr. I Wayan Susi Dharwawan, Research Officer, AFoCO, Indonesia.

The main questions on the panel discussion are as follows;

- (a) What are the expectations/challenges for the development of REDD+ towards Myanmar's target of increasing the Permanent Forest Estates from 31% (20 million ha) in 2014 to 51% in 2031?
- (b) How can these expectations/challenges be overcome in order to contribute more effectively to sustainable land use in Myanmar?

Dr. Thaug Naing Oo discussed on the questions of panel discussion that according to the Myanmar Forest Policy 1995, 30 Years National Forestry Master Plan, Permanent Forest Estates will be targeted to reach 40% of the total land area of the country in 2030-31. He explained what the aim of forest conservation is and he also clarified the sustainability of goods and ecosystem services. According to the aims of forest management on sustainable production of goods and services from the forest for the need of the local people and socio-economic development of the country, we should have enough forest area to fulfill that needs. Moreover, he explained another factor that support why the target is needed to achieve that country's economy is relying on the natural resources of forest because of developing country. He expressed that there are so many challenges and careful consideration to reach the targeted area of PFE in 2030-31. Both economic development and land related issue and land right are the challenges to reach the targeted forest area. Then, he supposed that the challenges can be overcome by developing National Land Use Policy in collaboration of government, Forest Department, line department and local people to settle the land right conflicts. He again highlighted that stakeholder consultation is important while developing National Land Use Policy. He hoped that one land use map and land law will be developed soon.

Next, Dr. Myat Su Mon highlighted institutional and technical challenges. From the point of institutional challenges,

human resource is very limited. So development of human resources and capacity are needed. From the point of technical challenges, she explained that the assessment of the forest parameter is very difficult. Therefore, it is needed to cooperate with INGOs, NGOs to solve those problems and supports of the International Organization are also required.

Dr. Ismail Hj. Parlan shared how forests are managed in Malaysia, first. He explained that the targeted forest area in Malaysia is 50% of the total land area and currently forest area in Malaysia is 44% of the country area which include rubber, oil palm plantations. He also explained that the land use threats also happen in Malaysia. He said that Myanmar can address the challenges because Myanmar have been conducting several kinds of conservation activities including REDD+ mechanism.

Dr. Nobuya Mizoue suggested that to strengthen and enhance traditional or current forest management system of Myanmar. He mentioned that Myanmar traditional management system is very success based on his research and presentations. He believed that according to his findings, Myanmar selection system is a good system for Myanmar. He also suggested that to consider for the people who live in the forest and who depend on the forest. He also commented that to review and assess CF and MSS comprehensively.

Dr. I Wayan Susi Dharwawan mentioned that Myanmar has many progress in REDD+ implementation. Based on 2

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days workshop, his opinion is that REDD+ implementation closely support job opportunities as well as economic growth. He suggested that Myanmar needs good forest governance for the REDD+ development which is important for Myanmar REDD+ implementation in future. He also shared about forest management and REDD+ activities of Indonesia.

The next turn is for Dr. Jose A. Puppim de Oliveira. In his discussion, he mentioned that effective land use management system by collaborative approach is very crucial not only for REDD+ outcome but also to strengthen land system in Myanmar.

Mr. Timothy Boyle discussed that the facts that he would like to talk have already discussed by other panelists. So, he just want to say thank you to all participants for interesting workshop and the other he want to suggest was to change the first question to round with the REDD+ target. His opinion is that less understanding on REDD+ is the challenge to get REDD+ target while stakeholder consultation and safeguard can enforce to get the target.

Then Dr. Hwan-Ok Ma wrapped up the discussions and invited the questions and suggestions to the participants. Daw Khin Hnin Myint commended that benefit sharing is problem in community level and Mr. Hamdan Bin Omar also suggested reviewing the target to be more target. Furthermore, Prof. Ohn Lwin commended to try to attend officials from national planning and financing

sector in such kind of this workshop to get comments to overcome the challenges relating to economic development. U Soe Win Hlaing also suggested that the target must be achievable and capacity building is needed to achieve REDD+ target.

Last, Dr. Thaug Naing Oo gave keyword notes. He would like to clarify the target of REDD again that actually, REDD+ is not setting the target and it tries to find the ways how to support national forest policy and the national program master plan. By the Forest policy, 1995, the target of the reserved and protected public forests was up to 30% and protected area system was up to 10%. In addition to that, 11% of land area was proposed as changeable or reserved land for the socio-economic development or any other purposes in 30 years master plan in 2000. So, he again clarified that REDD+ is not setting our target and it is trying to equalize national forest policy and find the way to support national forest policy and 30 years master plan. He highlighted that without the target, the country can't work well forward, so we try our best and using the REDD as tool and value to get to the policy target achievement.

Dr. Hwan-Ok Ma gave suggestion and expressed his appreciation to the participants and the workshop continued to closing ceremony.

SESSION VIII : POSTER SESSION

Thirteen posters were displayed in this session and three minutes brief presentations for each poster were done by the related poster presenters.

The themes of the posters are as follow;

1. **“Capacity building for developing REDD+ activities in the context of sustainable forest management”** by ITTO REDD project, RED-PD 038/11 Rev.3 (F),
2. **“Abstract of analysis on deforestation and forest degradation in Myanmar in the context of REDD+”** by Mr. Yukio Wada, Mr. Naoki Mitsuzuka, Asia Air Survey Co.Ltd,
3. **“Estimation of aboveground biomass using manual stereo viewing of aerial photographs in Cambodia”** by Mr. Katsuto Shimizu (Kyushu University, Japan), Dr. Tetsuji Ota (Kyushu University, Japan), Dr. Tsuyoshi Kajisa (Kagoshima University, Japan), Dr. Nobuya Mizoue (Kyushu University, Japan), Dr. Shigejiro Yoshida (Kyushu University), Gen Takao (FFPRI, Japan), Dr. Yasumasa Hirata (FFPRI, Japan), Dr. Naoyuki Furuya (FFPRI, Japan), Mr. Takio Sano (Asia Air Survey, Japan), Dr. Sokh Heng (Forest Administration, Cambodia), Dr. Ma Vuthy (Forestry Administration, Cambodia),
4. **“Detecting forest changes in Bago Mountains, Myanmar using annual time-series Landsat data, 2000-2014”** by Mr. Katsuto Shimizu (Kyushu University, Japan), Dr. Tetsuji Ota (Kyushu University, Japan), Ms. Zar Chi Win (Kyushu University, Japan), Dr. Nobuya Mizoue (Kyushu University, Japan), Dr. Shigejiro Yoshida (Kyushu University, Japan),
5. **“Assessment of local people’s dependency on selectively logged production forest: A case study in Bago Township, Bago Yoma, Myanmar”** by Mr. Thein Saung (Forest Department, Myanmar), Dr. Nobuya Mizoue (Kyushu University, Japan), Dr. Tetsuji Ota (Kyushu University, Japan), Dr. Tsuyoshi Kajisa (Kagoshima University, Japan), Dr. Shigejiro Yoshida (Kyushu University, Japan),
6. **“Abstract about climate change and REDD+ poster”** by Daw Khin Moe Kyi, RECOFTC,
7. **“Carbon assessment for REDD+: Using airborne LiDAR as an effective way for forest carbon monitoring in Cambodia”** by Dr. Tetsuji Ota (Kyushu University, Japan), Dr. Tsuyoshi Kajisa (Kagoshima University, Japan), Dr.

- Nobuya Mizoue, Dr. Shigejiro Yoshida (Kyushu University, Japan), Dr. Gen Takao, Dr. Yasumasa Hirata, Dr. Naoyuki Furuya (Forestry and Forest Products Research Institute, Japan), Mr. Takio Sano (Asia Air Survey Co., Ltd, Japan), Dr. Sokh Heng, Dr. MaVuthy (Forestry Administration, Cambodia),
8. **“Logging impact on residual trees and stand structure in Myanmar”** by Mr. Tual Cin Khai (Forest Department, Myanmar), Dr. Nobuya MIZOUE (Kyushu University, Japan), Dr. Tsuyoshi KAJISA (Kagoshima University, Japan), Dr. Shigejiro YOSHIDA (Kyushu University, Japan),
 9. **“Assessing rate of deforestation and changes of carbon stock on mangroves in Pahang, Malaysia”** by Mr. Hamdan O. (Forest Research Institute Malaysia), Dr. Ismail P. (Forest Research Institute Malaysia), Dr. Norsheilla M.J.C. (Forest Research Institute Malaysia), Dr. Samsudin M. (Forest Research Institute Malaysia), Dr. Norhaidi Y. (Pahang State Forestry Department),
 10. **“Zoning approach for landuse Management and REDD+ in Myanmar”** by Dr. Myat Su Mon (Forest Department, Myanmar), Mr. Nicolas Jewell (Consultant, SDC), Mr. Nay Lin Tun (Forest Department, Myanmar),
 11. **“REDD+ governance, policies and strategies of Myanmar”** by ITTO REDD project, RED-PD 038/11 Rev.3 (F),
 12. **“Forest resource use pattern and factors affecting local people’s dependency on forest resources; A case study in Yedashae Township, Bago Yoma, Myanmar”** by Ms. Zar Chin Win, Dr. Nobuya Mizoue, Dr. Tetsuji Ota, Dr. Tsuyoshi Kajisa, Dr. Shigejiro Yoshida, Kyushu University, Japan,
 13. **“Monitoring the changes in tropical forests and their carbon stocks using satellite and airborne remote sensing: case studies from Cambodia and Malaysia”** by Dr. Yasumasa Hirata (FFPRI, Japan), Dr. Gen Takao (FFPRI, Japan).

SESSION IX : CLOSING SESSION



Closing remarks of the workshop by Dr. Nyi Nyi Kyaw, Director General of Forest Department

The workshop was concluded with the closing remark by Dr. Nyi Nyi Kyaw, Director General of Forest Department, Ministry of Environmental Conservation and Forestry. First of all, he extended his warmest greeting and expressed his thanks to all. Then, he discussed on question 1 of panel discussion on behalf of Forest Department before he read out the closing remark. He briefly explained

that 30% Target of permanent forest estate is the legal status according to 30 years master plan and he shared the current forest cover status and the terms of forest by FAO.

In his closing remarks, he highlighted the importance of addressing climate change related issues and the crucial role of forest in climate change mitigation. He recalled the progress of REDD+

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negotiation and activities and he briefly explained that REDD+ is based on core idea of performance based payment as well as rewarding mechanism for those who could reduce greenhouse gas emissions from forests. It is not only for carbon credit but also for sustainable achievement of ecosystem goods and services. He also explained that all relevant stakeholders including government body, NGOs, CSOs, private sector and local communities have to work together because REDD+ is cross cutting mechanism and it is beyond forestry sector. Moreover, he highlighted the importance of national land use policy and sustainable land use management that can harmonize the development including basic need of local people and environment. Then, he suggested that it is definitely needed to

develop individual as well as institutional capacity. Finally, he expressed his belief that this workshop was very helpful for awareness raising of REDD+ and land use management. He concluded his remark by expressing his sincere appreciation to all delegates, participants and organizers of the workshop. A full text of remarks by Dr. Nyi Nyi Kyaw, Director General of Forest Department, Ministry of Environmental Conservation and Forestry is in Annex – 7.

IV. Field Visit to Observe Elephant Logging Practice and Forest Conservation Activities in the ITTO REDD+ Project Area of the Taungoo District

On 18th December, 2014, the participants of the workshop visited to the ITTO REDD+ project site in the Taungoo District of East Bago Yoma. The participants from the following organizations and university joined the field visit:

- a. UN-REDD programme,
- b. Kyushu University, Japan,
- c. International Tropical Timber Organization,
- d. AFoCO, Indonesia,
- e. FRIM, Malaysia,
- f. FFPRI, Japan,
- g. United Nation University, Japan,
- h. ITTO REDD+ Project, Myanmar.

During the field visit, they learnt the logging activities under Myanmar Selection System especially in elephant logging, REDD+ demonstration plots and agroforestry plantations, and the

field visit was to be active with the discussion of the participants. Moreover, they visited to the elementary schools of Zayepauk village in the ITTO REDD+ project site, Yedashe Township and they provided desks and some stationery to the elementary school.

Photo records for the activities of the international workshop can be seen as Annex – 8.

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Annex (1)

Workshop Programme

Day 1: 16 December 2014 – Development of REDD+		
	Session I: Opening Session	
0800-0900	Registration and Installation of posters	
0900-1030	Opening Speech	His Excellency Union Minister for MOECAF
	Congratulatory Remarks	Dr. Hwan-Ok Ma, Projects Manager, ITTO, Japan
	Congratulatory Remarks	Prof. Dr. Kazuo OGATA Senior Vice Président, Kyushu University, Japan
	Congratulatory Remarks	Mr. Timothy Boyle Regional Coordinator UN-REDD Programme Asia and the Pacific Region
	Photo Session	
	Refreshment	
1030-1200	Session II: Capacity Development for REDD+ and SFM	Chair – U Tint Swe, Director, Forest Department
	Strengthening sustainable forest management (SFM) and REDD+	Dr. Hwan-Ok Ma, Projects Manager, ITTO, Japan
	Development of REDD+ and the role of UN-REDD Programme	Mr. Timothy Boyle, Regional Coordinator UN-REDD Programme Asia and the Pacific Region
	Sustainability of selective logging based on recent research in Myanmar and Cambodia	Prof. Dr. Nobuya Mizoue Kyushu University, Japan
	REDD+ governance, policy and strategies of Myanmar	Dr. Thaug Naing Oo, National Project Manager, ITTO REDD+ Project, Forest Department

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	Discussion	
1200-1300	Lunch	
1300-1430	Session III: REDD+ MRV and REL/RL	Chair : Prof. Dr. Mizoue Nobuya, Kyushu University, Japan
	Establishment of Forest Reference Emission Level (FREL) in Indonesia	Dr I Wayan Susi Dharwawan, AFoCO
	Carbon assessment for REDD+ : Using airborne LiDAR as an effective way for forest carbon monitoring in Cambodia	Dr Tetsuji Ota, Kyushu University
	Identifying drivers of deforestation and developing reference emission level for REDD+ in Peninsular Malaysia	Dr. Ismail Hj. Parlan FRIM, Malaysia
	Creating enabling policies and strategies for full and effective participation of stakeholders in REDD+	Dr. Maung Maung Than, National Coordinator, RECOFTC
	Discussion	
1430-1530	POSTER PRESENTATION & Refreshment	
1530-1700	Session IV: Case Studies for REDD+	Chair – U Bo Ni, Director, Forest Department
	Use and issues of remote sensing for forest carbon monitoring at national level	Dr. Yasumasa Hirata, FFPRI
	UNDP's experiences in REDD+ in Myanmar: Indigenous people participation in REDD+	Daw Khin Hnin Myint, UNDP, Myanmar
	Analysis on deforestation and forest degradation in Myanmar in the context of REDD+	Mr. Yukio Wada and Mr. Mitsuzuka, Asia Air Survey Co. Ltd, Japan
	Discussion	
Closing of Day 1		
1830-2100	Welcome Dinner for Speakers and International Participants	

Day 2: 17 December 2014 – Sustainable Landuse Management		
0900-1200	Session V: Sustainable landuse management	Chair: Dr. San Win Pro-rector University of Forestry
	Institutions for land use management	Dr Jose A. Puppim de Oliveira UNU-IAS (Tokyo, Japan)
	Development of land use policy (draft) in Myanmar	U Kyaw Kyaw Lwin, Director, Forest Department, Myanmar
	Land tenure and land use right in Myanmar	U Shwe Thein Land Core Group
	Zoning approach for land use management and REDD+ in Myanmar	Dr. Myat Su Mon Assistant Director Forest Department, Myanmar
	Discussion	
	Refreshment	
	Participatory Landuse Planning for Sustainable Forest Management	U Kyaw Thinn Latt, RS-GIS Expert, WCS
	Enhancing ecosystem services	Dr. Toe Toe Aung Staff Officer Forest Department
	Different Types of People Oriented Approach in Community Forestry: Opportunities and Challenges in Myanmar	Dr. Ei Ei Swe Hlaing Staff Officer Forest Department
	Discussion	
1200-1300	Lunch	
1300-1420	Session VI: Forest tenure, safeguards and gender consideration for REDD+ and SFM in Myanmar	Chair: Dr Jose A. Puppim de Oliveira, UNU-IAS, Japan

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	The prospective role of AFoCO Regional Education and Training Center (AFoCO RETC) for capacity development on sustainable forest management under AFoCO Landmark Program in ASEAN Region by Dr. Lee Seong Han, Field Coordinator, AFoCO Landmark Program, Korea	Dr. Lee Seong Han Field Coordinator AFoCO Landmark Program
	Development of social and environmental standards for REDD+ program in Myanmar	U Pyi Soe Aung Range Officer Forest Department, Myanmar
	Gender consideration in REDD+ and sustainable landuse practices in Myanmar	Mrs. Naw Ei Ei Min, POINT
	Forest Carbon Mapping in Myanmar	U Aung Aung Myint Assistant Director Forest Department
	For Enhancing Social Safeguards Effectively in REDD+: A Comparison of three major REDD+ Safeguard initiatives through existing literatures	Dr. HYAKUMURA Kimihiko Associate Professor, Kyushu University
	Discussion	
1420-1440	Refreshment	
1440-1540	Session VII: Panel Discussion – The way forward for development of REDD+ in the context of sustainable landuse and forest management in Myanmar	Moderator: Dr. Hwan-Ok Ma, ITTO Panelists: <ul style="list-style-type: none"> ● Prof. Dr. Nobuya Mizoue, Kyushu University, ● Prof. Dr. Jose, UNU ● Mr. Timothy Boyle, UNREDD Programme ● Dr. Thaung Naing Oo, FD ● Dr. Myat Su Mon, FD ● Dr. Ismail, FRIM ● Dr. Wayan, Indonesia
1540-1550	Session VIII: Closing Session	Closing Remarks by Director General of Forest Department
	Day 3: 18 December 2014 - Field visit to REDD+ demonstration project in Taungoo District, East Bago Yoma, Myanmar	

Lists of Participants

Resource Persons

No.	Name	Position	Organization
1.	Dr. Hwan-Ok Ma	Projects Manager	ITTO
2.	Mr. Timothy Boyle	Regional Coordinator	UN-REDD programme
3.	Dr. Nobuya Mizoue	Professor	Kyushu University, Japan
4.	Dr. Thaung Naing Oo	National Project Manager	ITTO REDD+ Project, Forest Department
5.	Dr. I Wayan Susi Dharwawan	Research Officer	AFoCO, Indonesia
6.	Dr. Tetsuji Ota	Graduate Student	Kyushu University
7.	Dr. Ismail Hj. Parlan	Project Manager	FRIM, Malaysia
8.	Dr. Maung Maung Than	National Coordinator	RECOFTC
9.	Dr. Yasumasa Hirata		FFPRI, Japan
10.	Daw Khin Hnin Myint		UNDP, Myanmar
11.	Mr. Yukio Wada		Asia Air Survey Co. Ltd, Japan
12.	Dr Jose A. Puppim		UNU-IAS (Tokyo, Japan)
13.	U Kyaw Kyaw Lwin	Director	Natural Forest and Plantation Division, Forest Department
14.	U Shwe Thein	Chair	Land Core Group
15.	Dr. Myat Su Mon	Assistant Director	Planning and Statistics Division, Forest Department
16.	U Kyaw Thin Latt		RS-GIS Expert, WCS
17.	Dr. Toe Toe Aung	Staff Officer	Watershed Management Division
18.	Dr. Ei Ei Swe Hlaing	Staff Officer	Forest Research Institute
19.	Dr. Lee Seong Han	Field Coordinator	AFoCO Landmark Program
20.	U Pyi Soe Aung	Range Officer	Nature and Wildlife Conservation Division, Forest Department
21.	Daw Naw Ei Ei Min	Director	POINT
22.	U Aung Aung Myint	Assistant Director	Planning and Statistics Division, Forest Department
23.	Dr. HYAKUMURA Kimihiko	Associate Professor	Kyushu University

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Representatives from Ministry of Environmental Conservation and Forestry

No.	Name	Position	Organization
1.	Dr. San Win	Pro-rector	University of Forestry
2.	U Tint Swe	Director	Training and Research Development Division, Forest Department
3.	U Bo Ni	Director	Watershed Management Division, Forest Department
4.	U Ye Htut	Director	Zoological Gardens Division, Forest Department
5.	Dr. Thaung Naing Oo	Director	Forest Research Institute, Forest Department
6.	U Lin Aung Shwe	Manager	Myanmar Timber Enterprise
7.	U Ohn Lwin	Professor	University of Forestry
8.	U Tin Maung Lwin	Deputy Director	Watershed Management Division, Forest Department
9.	U Khin Maung Lwin	Principal	CFDTC (Hmawbi)
10.	U Hlaing Min Maung	Deputy Director	Planning and Statistics Division
11.	U Ko Latt	Deputy Director	Survey Department
12.	U Myint Swe	Lecturer	Survey Department
13.	U Saw Denniel	Assistant Director	Planning and Statistics Division, Forest Department
14.	U Aung Kyaw Oo	Assistant Director	Survey Department
15.	U Tin Htun	Assistant Director	Dry Zone Greening Department
16.	U Phone Lwin	Assistant Director	Dry Zone Greening Department
17.	U Soe Moe Oo	Staff Officer	Forest Department, Bago Region
18.	U Anug Than Myint	Staff Officer	Administration Department, Forest Department
19.	U Chit Hlaing	Staff Officer	Natural Forest and Plantation Division, Forest Department
20.	U Min Min Oo	Staff Officer	Natural Forest and Plantation Division, Forest Department
21.	U Nyain Hlaing	Staff Officer	Planning and Statistics Division, Forest Department

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22.	U Moe Aung	Staff Officer	Planning and Statistics Division, Forest Department
23.	Daw Zin Myoe Thu	Staff Officer	Planning and Statistics Division, Forest Department
24.	U Myo Minn Latt	Staff Officer	Planning and Statistics Division, Forest Department
25.	Dr. Tin Zar Kywe	Staff Officer	Nature and Wildlife Conservation Division, Forest Department
26.	U Tin Maung Win	Staff Officer	Nature and Wildlife Conservation Division, Forest Department
27.	U Win Maung Aye	Staff Officer	Watershed Management Division, Forest Department
28.	U Tual Cin Khai	Staff Officer	Watershed Management Division, Forest Department
29.	U Aung Ye Win	Staff Officer	Training and Research Development Division, Forest Department
30.	U Kyaw Myo Minn	Staff Officer	Inspection Division, Forest Department
31.	Dr. Rose Nay Win	Staff Officer	Forest Research Institute, Forest Department
32.	Dr. Chaw Chaw Sein	Staff Officer	Forest Research Institute, Forest Department
33.	Dr. Yazar Minn	Staff Officer	Forest Research Institute, Forest Department
34.	Daw Ingyin Khine	Staff Officer	Forest Research Institute, Forest Department
35.	U Thein Saung	Staff Officer	Forest Research Institute, Forest Department
36.	U Si Thu Minn	Assistant Manager	Myanmar Timber Enterprise
37.	U Myo Aung	Range Officer	Watershed Management Division, Forest Department
38.	U Tin Naing Soe	Range Officer	Natural Forest and Plantation Division, Forest Department

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39.	U Zaw Zaw	Range Officer	Planning and Statistics Division, Forest Department
40.	U Pyae Phyo Maung	Range Officer	Planning and Statistics Division, Forest Department
41.	U Nay Linn Htun	Range Officer	Planning and Statistics Division, Forest Department
42.	U Nyi Nyi Phyo	Range Officer	Extension Division, Forest Department
43.	Daw Naw Thu Thu Win	Range Officer	Training and Research Development Division
44.	U Thant Zin Htun	Range Officer	Inspection Division, Forest Department
45.	U Thuya Kyaw	Range Officer	Forest Department
46.	Daw Su Yi Hnin	Range Officer	Forest Department
47.	Daw Khine Thandar	Deputy Staff Officer	Planning and Statistics Department
48.	U Paing Htet Oo	Deputy Staff Officer	Environmental Conservation Department
49.	Daw Wut Yi Mon	Deputy Staff Officer	Environmental Conservation Department

Representatives from Line Ministries

No.	Name	Position	Organization
1.	U Chun Win Hlaing	Assistant Director	Settlement and Land Records Department
2.	U Maung Maung Lwin	Assistant Director	Planning Department
3.	U Aung Yin	Assistant Director	Department of Meteorology and Hydrology
4.	Daw Mu Mu Win	Assistant Director	Cooperative Department
5.	U Tin Oo	Assistant Director	Department of Mines
6.	U Nyunt Linn	Staff Officer	General Administration Department
7.	Dr. Aung Naing Oo	Lecturer	Yezin Agricultural University
8.	Dr. Thu Thu Win	Staff Officer	Union Attorney General's Office
9.	U Win Zaw Tun	Staff Officer	Rural Development Department

Representatives from INGOs/NGOs

No.	Name	Position	Organization
1.	U Sein Theit	Project Coordinator	ITTO REDD+ Project
2.	U Soe Win Hlaing		Myanmar Forest Association
3.	U Than Soe Oo	Program manager	MERN
4.	U Aung Htoo Myaing	Representative	ECCDI
5.	U Min Thein Htet	Member	BANCA
6.	Daw Khin Moe Kyi	Training coordinator	RECOFTC
7.	U Aung Kyaw Naing	Project coordinator	RECOFTC
8.	Ms. Happiness	Volunteer	POINT
9.	Sar Mu Khar	Lawyer	POINT
10.	U Kyaw Nyein	Executive Member	FREDA
11.	Daw Thet Thet Zaw	Secretary	JICA
12.	Mr. Has Ker Bru		Day Lo Khlo
13.	Mr. Has Mu Khar		Karen Lawyer Network
14.	U Myint Naing		Naga Association of Student
15.	U Minn Minn Htun		NGO
16.	U Zaw Zaw Htun		Wan-Lark
17.	U Minn Zarni Oo		Mon Youth
18.	U Salai Mauk Mauk Kyaw		May Lat C.F
19.	U Saw Hsar Ker Bru Shee		M.R.D.N
20.	U Kyaw Zaya Aung		SPECTRUM
21.	Daw Naw Muu Saw Htoo		SPECTRUM
22.	Mr. David Allan		SPECTRUM
23.	Mr. Jack		SPECTRUM
24.	Mr. Laing Kyu Shee		ECODEV
25.	Mr. Sanjay Mathur		UNOPS
26.	U Maung Maung Kyaw		UNOPS
27.	U Myint Kyaw	Geologist	Geologist C.
28.	Mr. Lau		FAO

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Representatives from private organizations

No.	Name	Position	Organization
1.	U Sa Lai	Advisor	Pyoe Pin
2.	U Win Naing	Manager	Royal Tree Services
3.	U Aung Min	General Manager	Phyo Si Thu

Lists of International Distinguished Guests

No.	Name	Position	Organization
1.	Dr. Kazuo OGATA	Senior Vice President, Professor	Institute of Tropical Agriculture, Kyushu University
2.	Dr. Mitsuyasu YABE	Professor	Faculty of Agriculture, Kyushu University
3.	Dr. Yoshinori YAMAMOTO	Professor	Faculty of Agriculture, Kochi University
4.	Dr. Hisako NOMURA		Lecturer, Faculty of Agriculture, Kyushu University
5.	Mr. Hamdan Bin Omar		RS-GIS Expert, FRIM, Malaysia
6.	Mr. Katsuto Shimizu		Graduate Student, Kyushu University, Japan
7.	Mr. Naoki Mitsuzuka		Asia Air Survey Co.,Ltd. (AAS)
8.	Mr. Vo Hong Tu		NS2, Kyushu University, Japan

Representatives from Media

No.	Name	Position	Organization
1.	U Aung Thit Soe	Producer	Sky Net
2.	Daw Myo Thandar Oo	Reporter	Sky Net
3.	U Kyaw Kyaw	Reporter	Sky Net
4.	Daw Naw Ko Ko	Reporter	The Voice
5.	U Paing	Reporter	Democracy Today
6.	U Thein Toe	Editor	Mizema
7.	Daw Su Mon	Editor	The Trade Time Media
8.	Daw Moe Moe	Reporter	Modern

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Resource Persons	23
Representatives from the Ministry of Environmental Conservation and Forestry	49
Representatives from line ministries	9
Representatives from INGOs/ NGOs	28
Representatives from private organizations	3
International distinguished guests	8
Representatives from media	8
Total Participants	128

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Annex (3)

Opening Speech by His Excellency Union Minister, Ministry of Environmental Conservation and Forestry at the Opening Ceremony of International Workshop on REDD+ and Sustainable Land Use Management in Myanmar

- Excellency Deputy Minister from Ministry of Environmental Conservation and Forestry
- Dr. Hwan-Ok Ma from ITTO
- Pro-Rector and Professors from Kyushu University and United Nations University, Japan
- Representatives from UN-REDD Programme, international organizations, CSO and local NGOs
- Officials from line Ministries
- Distinguished guests, ladies and gentlemen

A Very Good Morning,

First of all, I would like to extend my warmest welcome to you all. I am also wishing you all in physical and spiritual well-being. It is indeed my great honor and pleasure to deliver an opening speech for this occasion on “International Workshop on REDD+ and Sustainable Land Use Management” organized by Forest Department and ITTO in collaboration with Kyushu and United Nations Universities and many other international organizations.

I am delighted that this workshop has timely come out to be in line with the global efforts to combat the climate change impacts through enhancing the role of forests and sustainable land use management.

Ladies and gentlemen,

Taking this opportunity, I would like to briefly touch upon cooperation between our Ministry and ITTO. As you are aware, Myanmar joined ITTO in 1993 as a member country. Since then, we have been working together for sustainable forest management in order to support the goal of sustainable development.

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With the support of ITTO, we started to implement a project, namely, “introduction of lesser-used-timber species into the world market” in 1997. Up to present, we have jointly implemented 8 projects with total financing of USD 2.4 Millions in the fields of sustainable forest management, biodiversity conservation, climate change mitigation, agroforestry, development of bamboo resources and utilization and formulation of criteria and indications for sustainable forest management.

On-going ITTO REDD+ Project started in December 2012 aiming to strengthen capacity of the government staff as well as other relevant stakeholders for the implementation of REDD+.

The main activities are capacity building and awareness raising, formulation of REDD+ strategies, establishing Monitoring, Reporting and Verification System, setting Reference Emission Level/Reference Level, developing social and environmental safeguards and rural development activities. On the other hand, the project is also designed to improve the capacity of relevant stakeholders and the institutions to ensure to achieve sustainable forest management.

As you all are aware, REDD+ is an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development.

Realizing the REDD+ as an innovative approach, Myanmar joined UN-REDD Programme in December 2011. Since then, REDD+ activities are accelerated with momentum and we were able to develop REDD+ Readiness Roadmap in June 2013 with the support of Norwegian government and UN-REDD Programme.

Now, we have been planning to implement the REDD+ Readiness Roadmap with the support of UN-REDD Targeted Support. At the same time, we have also been implementing pilot projects in cooperation with ITTO, Korea Forest Service, UNDP, RECOFTC, Asia Air Survey Co. Ltd and other development partners.

Ladies and Gentlemen,

According to the FAO Forest Resources Assessment 2010, annual deforestation rate between 2000 and 2010 amounted to 13 million hectares. In this regards, IPCC report (2007) estimated that greenhouse gases emissions from forestry sector as a result of deforestation and forest degradation was 17.4% of the total emissions from all sectors. It is apparent that deforestation and depletion of forest resources have direct impact on global climate change.

Therefore, IPCC Fifth Assessment Report 2014 clearly stated that “Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of climate system, increasing the livelihood of severe, pervasive and irreversible impacts for people and ecosystems. Limiting climate change would require substantial and sustained reductions in greenhouse gas emissions which can

limit climate change risks”.

Within this context, the role of forests are becoming increasingly important in global climate change agenda and REDD+ activities are also recognized as important component of the climate change mitigation options. For example, REDD+ related issues are considered as an important agenda of UNFCCC as well as global climate change summits.

New York Declaration on Forests which was declared during the United Nations Climate Summit held on 23 September 2014 in New York stated that reducing emissions from deforestation and increasing forest restoration will be extremely important in limiting global warming to 2°C. For this, at least 50% of the rate of global deforestation will have to be reduced by 2020 and strive to end natural forest loss by 2030. Moreover, 350 million hectares of degraded landscapes and forestlands will have to be restored by 2030. It is also declared to scaling up payments for verified emission reductions from forests such as REDD+.

Likewise, ASEAN Joint Statement on Climate Change 2014 which was declared during 25th ASEAN Summit held in November 2014 in Nay Pyi Taw also encouraged REDD+ and development of financial mechanism.

Moreover, Aichi Biodiversity Target and Nagoya Protocol under UNCBD also considered forests as a vital role for climate change mitigation and enhancing ecosystem services and non-carbon benefits.

Ladies and Gentlemen,

Land use, land use change and forestry becomes as an important agenda of climate change mitigation and adaptation. For example, changing forests to other land use can lose not only forests but also ecosystem services. Therefore, it is very important to have systematic land use management plan to ensure balancing development and environmental conservation. Since the nature of REDD+ is a large scale and landscape level, all land uses should be managed to ensure the minimum emissions of greenhouse gases.

Capacity building and institutional strengthening is of crucial importance for sustainable management of forests as well as for REDD+. It is also necessary to mainstream climate change mitigation actions such as REDD+ and green economy into the district and national forest management plan.

Nowadays, the Government of Myanmar has been promoting Green Economy Green Growth for the sustainable development of the country. Myanmar Climate Change Alliance (MCCA) was formed in October 2013 in order to handle climate change related issues effectively. Therefore, it is very important to take this opportunity for scaling up the REDD+ as a Green Growth approach at the national level.

In line with the national reform process, our Ministry have also been transforming

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from extractive industry to service economy. In this juncture, we should pay more attention upon our tasks for smooth and effective transition in achieving green economy in forestry sector.

As you all are aware, forests represent one of the largest and most cost-effective climate solutions available today. Sustainably managed and restored forests can contribute to climate change mitigation, economic growth, poverty alleviation, food security, climate resilience and biodiversity conservation. It can also help secure respect for the rights of forest dependent indigenous peoples, while promoting their participation in decision making. Since the REDD+ is cross-sectoral mechanism, all line ministries, NGOs, CSOs, local communities and relevant stakeholders are strongly encouraged to work together in order to achieve not only for climate change benefits but also for other ecosystem services.

Within this context, this International Workshop is organized aiming to share experiences and lessons learned about REDD+ and sustainable land use management practices among international experts and relevant stakeholders.

Experts and Professors from international organizations, renowned universities, government ministries, UN agencies and NGOs will be presenting a wide range of subjects related to REDD+ and sustainable land use management. I firmly believe that this International Workshop will provide invaluable recommendations and outcomes to support the successful implementation of Myanmar's REDD+ Roadmap and sustainable land use management.

Ladies and gentlemen,

In conclusion, I would like to express my sincere appreciation to Dr. Hwan-Ok Ma, Projects Manager from ITTO for continuous supports and facilitation for the successful organizing this International Workshop. I am also very grateful to all resource persons and participants from all international organizations, NGOs and line Ministries for their contributions and active participation. With this, I would like to encourage all participants to make utmost efforts and constructive discussions for the success of this Workshop.

I wish this international workshop every success.

Thank you very much.

Annex (4)

Opening Remarks by Dr Ma Hwan-Ok, International Tropical Timber Organization at the Opening Ceremony of International Workshop on REDD+ and Sustainable Land use Management in Myanmar

- His Excellency Union Minister of Environmental Conservation and Forestry (MOECAF) of Myanmar,
- His Excellency Dr. Thet Thet Zin, Deputy Minister of MOECAF,
- Prof Dr Kazuo Ogata, Kyushu University
- Mr Timothy Boyle, UN-REDD programme Asia and the Pacific region
- Distinguished representatives of international, regional and national organizations and civil society organizations,
- Distinguished guests, Ladies and Gentlemen,

A very good morning, Mingalaba!

Today, I am delighted to be in the Forest Department, Nay Pyi Taw to attend this auspicious International Workshop on REDD+ and Sustainable Land use Management in Myanmar which is being organized with many partners under the ITTO project on “Capacity Building for Developing REDD+ Activities in the Context of Sustainable Forest Management”.

Indeed it is my great honour and privilege, on behalf of International Tropical Timber Organization (ITTO), to welcome you all and pay my respects to the Forest Department and MOECAF for their great efforts in organizing this international workshop. I would like to express my appreciation to today workshop partners and supporters including Kyushu University of Japan Prof Dr Mizoue, Dr Ota, Dr Hakumura, United Nations University-IAS, Dr Jose Puppín, AFoCO- Dr Lee Sung Han and Dr Wayan, FFPRI of Japan – Dr Hirata, FRI of Malaysia – Dr Ismail Parlan, Asia Air Survey Co.Ltd.- Yukiko Wada, UNDP-Myanmar, RECOFTC-Myanmar and NGOs of Land Core Group and POINT.

I hereby wish to extend my heartfelt thanks to H.E. Dr Win Tun, Union Minister for delivering an important key note speech. I wish also take this opportunity to express ITTO's gratitude to H.E. Dr Win Tun for the long-term partnership with ITTO in promoting sustainable forest management in the country.

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I would also like to put on record ITTO deep appreciation to the donor to this ITTO project, namely the Governments of Norway, Switzerland, USA and Japan for raising the funds required to make this important project possible in Myanmar through ITTO Thematic Programme on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services (REDD+).

Excellencies, Distinguished guests, Ladies and Gentlemen,

Climate change is a long-term challenge but given the scale by which greenhouse gases are accumulating in the atmosphere and increasing natural disasters across the regions, urgent actions are required. So, I believe that after two national workshops in two-year ago and last year, today's international workshop will be an important opportunity to review again the fundamentals of REDD+ and the negation outcomes of the recent COP 20 in Lima, Peru. It will also provide a good opportunity to review effective sustainable land use systems.

In order to sustain tropical forests, ITTO has recognized that it is important to have robust land-use planning and sustainable land use management systems which allow the establishment and operation of permanent forest estates systems by national legal framework.

Excellencies, Distinguished guests, Ladies and Gentlemen,

Myanmar has established systematic forest management frameworks through the Myanmar Forest Act 1902 and later with the Forest Law 1992, and the Community Forestry Instructions (CFI) 1995. Since its creation in 1923, the Forest Department has practiced the selection system to manage the country's natural forests with community-based taungya system. However, the country has been cited as one of 10 tropical countries with the highest annual deforestation rate assessed at 1.3 % in the last decade of 20th century. Therefore, there is the important need to establish and implement effective REDD+ strategies and action plans towards strengthening sustainable land management systems.

I am currently working with the Forest Department in implementing the ITTO REDD+ project. I am pleased to recognize that in the project sites of the Taungoo District, mutual trust between communities and the Forest Department has been significantly improved. In the Yedash Township covering about two hundred thousand hectares of forests, thirty-eight villages are actively participating in forest management and REDD+ activities with the establishment of a forest extension center and a humble elementary school.

However, I noted that insufficient assistance for livelihood improvement and low level of social and human capacity of local communities for forest management is still a major challenge. Continued investments in the management capacity of local

communities from REDD+ Readiness activities are crucial.

In 1994, last two decades ago when I started my work with the Ministry of Forestry of Myanmar as a Korean reforestation advisor to the critical dry zone of central part of the country under KOICA programme, I had unforgettable memories of the great efforts of nation-wide rehabilitation activities.

Since 1996 through ITTO, I have been privileged to observe a long journey to SFM in the country.

Excellencies, Distinguished guests, Ladies and gentlemen,

The New York Declaration on Forests adopted at the UN Climate Summit in last September highlighted that forests are essential to our future. This Declaration calls for action to conserve, sustainably manage and restore forests for their contribution to green economy, poverty reduction, food security, climate resilience and biodiversity conservation.

I trust more innovative, integrative and inclusive REDD+ related policies and activities will be coming soon to build sustainable livelihoods of communities and green economy. In light of this, I wish the continued success of MOECAF in particular the continued leadership of HE Dr Win Tun towards the advancement of SFM.

In the coming years, I firmly believe that based on more than hundred old SFM practices and community-based Tanugya system, MOECAF will address the challenges of REDD+ in order to more effectively conserve and manage the country's forest resources as a treasure for the people.

You can do it.

Thank you for your attention, Chei-zu tin-bar-te!

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Annex (5)

Opening Remarks by Dr Kazuo OGATA, Senior Vice President, Kyushu University at the Opening Ceremony of International Workshop on REDD+ and Sustainable Land use Management in Myanmar

- His Excellency Union Minister of Environmental Conservation and Forestry (MOECAF) of Myanmar,
- His Excellency, Dr. Nyi Nyi Kyaw, Director General of Forest Department, Myanmar,
- Dr. Hwan-Ok Ma, Projects Manager, International Tropical Timber Organization (ITTO),
- Mr Timothy Boyle, Regional Coordinator of UN-REDD programme Asia and the Pacific region,
- Distinguished participants, Ladies and Gentlemen,

Good morning,

It is a great honor and pleasure for me to present this congratulatory remark on the occasion of the “International Workshop on REDD+ and Sustainable Land Use Management in Myanmar”.

First of all, I would like to express my sincere appreciation for our important partners, Forest Department, Ministry of Environmental Conservation and Forestry (MOECAF) of Myanmar and International Timber Organization for their coordination and leadership of this important workshop.

In particular, my deep gratitude is extended to Dr. Thaung Naing Oo, Director of Forest Research Institute, Forest Department of Myanmar and Dr. Hwan-Ok Ma, Projects Manager, International Tropical Timber Organization for their great efforts towards this workshop.

His Excellency, Ladies and Gentlemen,

As we know, our earth is facing many environmental and social crises such as global warming, biodiversity loss, increasing natural disaster, water shortage, and pollution etc. Many of these are very serious, especially in countries in Asia with accompanying rapid economic growth.

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In addition, many of these current issues are closely related with “Forest”, especially in tropical forest. Many factors exist behind these environmental issues and they are inter-related in complicated manners. To solve these critical issues under such complicated world, we need efficient collaboration among different stakeholders, such as policy makers, governmental officials, NGOs, villagers and scientists.

In this sense, this International Workshop will provide us a great opportunity to have a platform to enhance our networking and to facilitate our discussion among different stakeholders, focusing on REDD+ and Sustainable Landuse Management.

On behalf of Kyushu University, Japan, here, I would like to express my sincere appreciation for Myanmar government to allow your staffs to send to our Kyushu University for their Master or Doctor Course Studies.

In case of Agriculture and Forestry sectors, so far, 20 doctor and 54 master students form Myanmar have graduated our Faculty of Agriculture, Kyushu University. Within a total of 74, 2 Doctors and 7 Masters are from Ministry of Environmental Conservation and Forestry (MOECAF).

Dr.Naing Zaw Htun,
Dr. Myat Su Mon,
Mr. Aung Kyaw Soe,
Mr. Tual Cin Khai,
Mr. Thein Saung,
Mr. Thant Sin Kyaw,
Ms. Zar Chi Win,
Mr. Sie Thu Minn,
Mr. Kyaw Phone Wai.

I know that these persons studied in the field of Myanmar under the supervision of Dr. Mizoue and Dr. Yasumasa. These students have played a very important role of the bridge between Myanmar and Kyushu University. Through these educational activities, Kyushu University has been carrying out collaborative research and education projects in Myanmar. In this sense, I would like to sincerely thank the former and current Myanmar students to select our University as a place for study under kind permission from Myanmar Government. University is one of the important sectors and just as Educational Instiute but as research institute.

His Excellency, Ladies and Gentlemen,

I am glad to inform that this year, our University has successfully been nominated as one of 13 Top Universities in Japan, so called “Top Global University” under a new project of our Japaanese Government. I am responsible for this new project as a Senior Vice President and I can promis that under this new project, Kyushu University will seek for more and more Excellencies of education and research at global scale.

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One of important targets of this new project is to promote international activities, with increasing number of international collaborative research projects. In this sense, I do hope that this international workshop will be connecting further close collaboration among Myanmar Government, other organizations over the world and Kyushu University as well as other universities.

In closing my address, I wish that this international workshop will be fruitful, meaningful, and enjoyable for all participants.

Thank you very much for your attention.

**Prof. OGATA Kazou,
Senior Vice President,
Kyushu University.**

Annex (6)

**Opening Remarks by Mr. Timothy Boyle, Regional Coordinator,
UN-REDD Programme at the Opening Ceremony of International Workshop
on REDD+ and Sustainable Land use Management in Myanmar**

Excellencies, Colleagues, Ladies and Gentlemen,

I have been asked to give some Congratulatory Messages, and in this regard I echo the observations of the preceding speakers in congratulating MOECA, and particularly the Forest Department in organizing this important international workshop, and to the sponsors of the workshop – AFoCO, UNU, Kyushu University, and ITTO.

However, the invitation to offer congratulatory remarks did not specify precisely whom I should be congratulating. So, in addition to recognizing the outstanding efforts of the Forest Department, I would like to congratulate all of us. Many sitting here today are foresters; others may have been trained in other disciplines, but we are all trying to ensure that the forests of Myanmar and other countries are conserved and sustainably managed, thus contributing to many environmental and social benefits, including climate mitigation.

When I first spoke in this room, over 4 years ago, I was asked to explain REDD+, something I will be doing again, later this morning. I preparing for my up-coming presentation, I return to look at my presentation 4 years ago. That was just after the Cancun COP, so the “bare bones” of REDD+ had been set out, but there was little guidance on how the REDD+ mechanism might work in practice. Now, just 4 years later, the changes are dramatic. Not only is REDD+ a fully developed mechanism, but one country (Brazil) is already seeking results-based payments through REDD+. The forest sector is recognized as the jewel in the crown of the UNFCCC process – while progress in many other areas has been slow, REDD+ has forged ahead, and we can be proud of the efforts of foresters and others around the world in this respect.

Therefore, this workshop is timely and important. Myanmar can follow in the steps of Brazil and others and look forward to the opportunity for results-based payments through the REDD+ mechanism. The UN-REDD Programme is honoured to be assisting Myanmar in this regard. So, while congratulating all of us, may I also encourage all of us to focus our efforts over the next three days to setting the foundation for rapid progress in Myanmar to results-based payments through REDD+.

My thanks once again to the Forest Department, and I look forward to interacting with all of you over the next three days.

Thank you.

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Annex (7)

Closing Remarks by Director General of Forest Department at the Closing Ceremony of International Workshop on REDD+ and Sustainable Land Use Management in Myanmar

- Dr. Hwan-Ok Ma from International Tropical Timber Organization ITTO
- Prof. Dr. Nobuya Mizoue from Kyushu University
- Prof. Dr. Jose Puppim from United Nations University
- Mr. Timothy Boyle from UN-REDD Programme
- Distinguished delegates from AFoCO Secretariat-Korea, FORDA-Indonesia and FRIM-Malaysia
- Representatives from UN Agencies, INGOs, local NGOs, CSOs and private sector
- Officials from line Ministries
- Distinguished guests, ladies and gentlemen

Good afternoon,

First of all, I would like to extend my warmest greetings to you all. It is indeed a great honour and pleasure having a chance to deliver the Closing Remark of this International Workshop on REDD+ and Sustainable Landuse Management in Myanmar”.

I also would like to extend my sincere appreciation to Dr. Hwan-Ok Ma from International Tropical Timber Organization (ITTO) and collaborative partners, resource persons and participants for your precious time and contributions to this Workshop.

Ladies and Gentlemen!

As you all are aware, climate change is the greatest challenge in our time. It has wide-ranging effects on the environment, water resources, agriculture, food security, human health, biodiversity, socio-economic and livelihoods of the people. Therefore, almost all the countries in the world have been trying their best to reduce carbon emission in order to address climate change related issues.

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Forestry is one of the important sectors that contribute climate change mitigation and adaptation because it is a sink as well as a source of carbon dioxide. Emissions from deforestation and forest degradation in developing countries amount to about 17.4 % of the total global emissions of greenhouse gases. In this connection, Low Carbon, Green Economy and Green Growth approach is becoming very popular in Climate Change Agenda. New policy and legislations as well as innovation and investment are evolving with momentum in the world.

With the recognizing the important role of forest in climate change mitigation, Clean Development Mechanism (CDM) has been initiated at Kyoto Protocol in 1997 as well as Reducing Emissions from Deforestation and Forest Degradation (REDD+) in developing countries has been accepted at the UNFCCC COP 15 in 2009 in Copenhagen, Denmark.

Likewise, Rio+20 which was held in June 2012 in Rio De Janeiro, Brazil also highlighted the important role of forests and potentiality of REDD+ in enhancing social, economical and ecological benefits for the people as well as sustainable development of the countries.

As you are aware, the progress of REDD+ negotiation is dynamic and still on-going at UNFCCC member countries. UNFCCC negotiation aims to finalize a new global climate change agreement at the COP 21 Conference in Paris at the end of 2015. In the mean time, COP 20 was held in Lima, Peru in order to produce a working draft text for a deal that can finalize in Paris. The COP 21 in Paris is most likely to be a hotchpotch Indented Nationally Determined Continuations (INDC) post 2020 target determined by each country and a starting point for the years of continued negotiation about how national goals interact with global framework.

In this regards, I would say that there are many challenges to be overcome as well as many opportunities for the developing countries in the years to come.

Ladies and Gentlemen,

REDD+ is based on core idea of performance based payment as well as rewarding mechanism for those who could reduce greenhouse gas emissions from forests.

Within this context, I would like to urge you that the ultimate objective of REDD+ should not be limited only for carbon credit, should integrate to achieve co-benefits such as biodiversity, water regulation, soil conservation, reducing poverty and sustainable development. Of course, capacity building, institutional strengthening and improving forest management practices for sustainable management of forests should also be essential part of REDD+.

Furthermore, REDD+ is cross cutting mechanism and it is beyond forestry sector. Therefore, all relevant stakeholders including government body, NGOs, CSOs, private sector and local communities have to work together. In this respect, I would

say community forestry, agro-forestry, social forestry, community based forest management practices and forestry related small-scale business will be fundamental framework for the development of public private partnership in forestry sector.

In this context, I also would like to highlight the importance of sustainable land use management that can ensure to balance between development and the environment as well as to fulfill the basic needs of the people and the sustainable development of the country. With realizing its vital role in sustainable development, we have been developing a land use policy and the fifth draft of the land use policy has been developed. Now it is under the process of stakeholder consultation and we will organize a national level workshop to finalize the land use policy. We are aiming to adopt the land use policy to benefit to the people and country, harmonize land use systems, balance between development and conservation, to protect the land use right of the citizens and to improve land administration system.

With the reflection of changing political, social and economical paradigm, we have been trying our best to conserve our forests, land and natural resources in parallel with socio-economic development.

With this, we definitely need to develop individual as well as institutional capacity. Accordingly, REDD+ should be designed to mobilize the resources and technology to support the development of forestry sector as well as sustainable development of the country.

Ladies and Gentlemen,

I am very delighted to know that 22 technical papers were presented by the experts from international organizations, renowned Universities, research institutions, INGOs, local NGO and REDD+ Core Unit of Forest Department.

Therefore, I firmly believe that this Workshop is very helpful for improvement of awareness about REDD+ and important role of sustainable land use management in harmonizing environment and development. It also contributed substantially to the implementation of REDD+ Roadmap as well as sustainable land use management in Myanmar.

Ladies and gentlemen,

In conclusion, once again, I would like to express my sincere appreciation to ITTO for supporting REDD+ Capacity Building Project and Dr. Hwan-Ok Ma, Projects Manager of ITTO for untiring facilitation for the project as well as for this International Workshop. I would also like to extend my sincere thanks to all resource persons, participants and organizers for their endless efforts and contributions that made our International Workshop great success.

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I wish you all have a pleasant and enjoyable time during field trip to Toungoo District as well as staying in Nay Pyi Taw. I also wish you all have a safe return to your home.

Thank you very much.

Photo Records of the Workshop



Group Photo together by Senior Officials from Ministry of Environmental Conservation and Forestry, Resource Persons and Participants



Distinguished Guests and Participants Attending Opening Session of the Workshop

Records of Presentation



International Workshop on REDD+ and Sustainable Landuse Management in Myanmar
16-18 December 2014, Nay Pyi Taw, Myanmar

Strengthening SFM and REDD+: Increasing sustainable landuse management and green economic growth is crucial

Ma Hwan-ok



INTERNATIONAL TROPICAL TIMBER ORGANIZATION (ITTO)

International Workshop on REDD+ and Sustainable Landuse Management in Myanmar
16-18 December 2014, Nay Pyi Taw, Myanmar

Sustainability of selective logging in tropical seasonal forests in Asia

Recent studies in Myanmar and Cambodia

Nobuya Mizoue
(Kyushu University, Japan)

Tual Cin Khai, Thein Saung, Zar Chi Win
(Forest Department, Myanmar)

Chheng Kimsun, Khorn Saret, Kao Dana
(Forestry Administration, Cambodia)

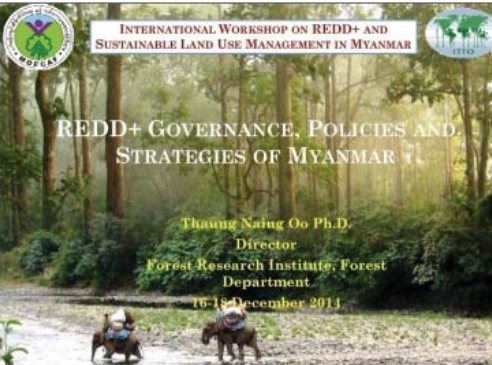
Tsuyoshi Kajisa (Kagoshima University, Japan)

Tetsuji Ota, Shigejiro Yoshida
(Kyushu University, Japan)

Development of REDD+ and the role of UN-REDD Programme

International Workshop on REDD+ and Sustainable Landuse Management in Myanmar
Nay Pyi Taw
16th December, 2014

Tim Boyle
UNDP/UN-REDD Programme



INTERNATIONAL WORKSHOP ON REDD+ AND SUSTAINABLE LAND USE MANAGEMENT IN MYANMAR

REDD+ GOVERNANCE, POLICIES AND STRATEGIES OF MYANMAR

Thaung Naing Oo Ph.D.
Director
Forest Research Institute, Forest Department
16-18 December 2014

ESTABLISHMENT OF FOREST REFERENCE EMISSION LEVEL (FREL) IN INDONESIA



I WAYAN SUSI DHARMAWAN

Forestry Research and Development Agency,
Ministry of Environment and Forestry, Republic of Indonesia




AFoCo Regional Project Component 2
ASEAN-KOREA Forest Cooperation

International Workshop on REDD+ and Sustainable Landuse Management in Nay Pyi Taw, Myanmar , 16-18 December 2014

Carbon assessment for REDD+ : Using airborne LiDAR as an effective way for forest carbon monitoring in Cambodia.

OTA TETSUJI (KYUHU UNIVERSITY), MIZOUE NOBUYA, YOSHIDA SHIGEJIRO, KAJISA TSUYOSHI (KAGOSHIMA UNIVERSITY)



Identifying Drivers of Deforestation and Developing Reference Emission Level for REDD+ In Peninsular Malaysia

Hamdan O.¹, Ismail P.¹, Norsheilla M.J.C.¹, Samsudin M.¹ & Norhaidi Y.²

¹Forest Research Institute Malaysia, 52109 FRIM, Kepong, Selangor, Malaysia.
²Pahang State Forestry Department, 25990 Kuantan, Pahang

Forest Research Institute Malaysia
 15.0 MEI 2014
 Kuala Lumpur

Indigenous People Participation in REDD+

Creating enabling policies and strategies for full and effective participation of stakeholders in REDD+

Maung Maung Than
 Myanmar Country Program
 RECOFTC

Naypyitaw 16 December 2014

THE REDD+ FOR PEOPLE AND PLANET

Analysis on deforestation and forest degradation in Myanmar in the context of REDD+

SoFDM

Study on Forest Degradation Monitoring for REDD+ Cooperation with Forest Department of MOECAF, Myanmar

Naoki Mitsuzuka, Yukio Wada :Asia Air Survey co.,Ltd

Use and issues of remote sensing for forest carbon monitoring at a national level in REDD+ implementation

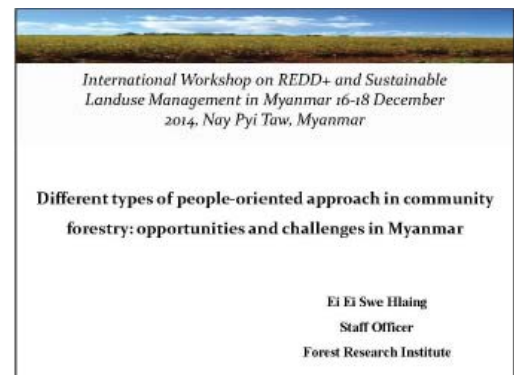
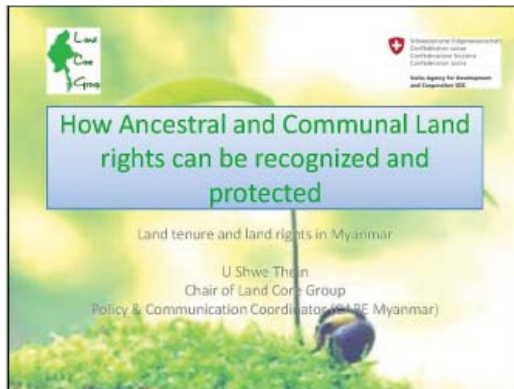
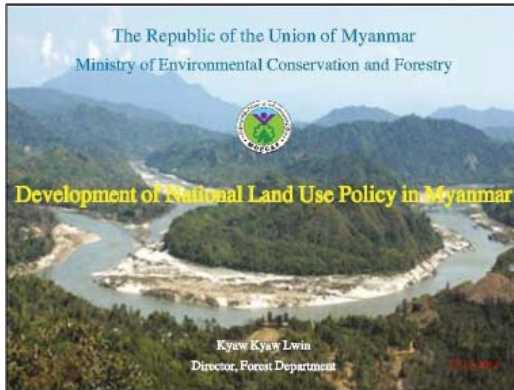
Yasumasa Hirata
 Forestry and Forest Products Research Institute, Japan

International Workshop on REDD+ and Sustainable Landuse Management in Myanmar
 16-18 December 2014, Nay Pyi Taw, Myanmar

Institutions for Land Use Management

Jose A. Puppim de Oliveira
 United Nations University (UNU-IAS)
 Tokyo, Japan


REDD+ AND SLM IN MYANMAR



The prospective role of AFoCo RETC for capacity development on sustainable forest management under AFoCo Landmark Program in ASEAN Region



Seong Han Lee, Ph.D.
Project Manager for AFoCo RETC
ASEAN-Korea Forest Cooperation Secretariat



Development of Social and Environmental Standards for REDD+ Program in Myanmar

Pyi Soe Aung
Range Officer
Nature and Wildlife Conservation Division
Forest Department

International Workshop on REDD+ and Sustainable Landuse Management in Myanmar, 16-18 December 2014, Nay Pyi Taw, Myanmar



GENDER CONSIDERATION IN REDD+ AND SUSTAINABLE LAND USE PRACTICES

CURRENT NATIONAL FOREST MONITORING SYSTEM AND FOREST CARBON MAPPING IN MYANMAR



REDD+ and Sustainable Landuse Management in Myanmar, 16-18 December 2014, Nay Pyi Taw, Myanmar

U Aung Aung Myint
Assistant Directors, RS & GIS Section,
Planning and Statistics Division,
Forest Department,
Ministry of Environmental Conservation and Forestry
The Republic of the Union of Myanmar

For enhancing social safeguards effectively in REDD-plus
A comparison of three major REDD+ safeguard initiatives through existing literatures

HYAKUMURA Kimihiko
Institute of Tropical Agriculture, Kyushu University
IWANAGA Seiji
Faculty of Life and Environmental Sciences, The University of Tsukuba
YOKOTA Yasuhiro
Kyushu Research Center, Forestry and Forest Products Research Institute

Power point presentation files of the workshop are available on ITTO-REDD+ facebook page (<https://www.facebook.com/redd.psd.fd.moecaf>) or from the link below ;

http://www.mediafire.com/download/5orw2eexd75w8vd/ppt+files+of+the+International+Workshop+on+REDD%2B+%26+Sustainable+Landuse+Management+in+Myanmar_pdf+version.rar

REDD+ AND SLM IN MYANMAR



Discussion by panelists of the workshop



Questions and Discussions by Participants on Paper Presentation



Questions and Discussions by Participants on Paper Presentation

*Questions and Discussions
by Participants on Paper
Presentation*



*Questions and Discussions
by Participants on Paper
Presentation*



*Questions and Discussions
by Participants on Paper
Presentation*



REDD+ AND SLM IN MYANMAR



Questions and Discussions
by Participants on Paper
Presentation



Questions and Discussions
by Participants on Paper
Presentation



Questions and Discussions
by Participants on Paper
Presentation

Records of Poster Presentation



Presentation by Daw Khin Moe Kyi, RECOFTC



Presentation by U Tual Cin Khai, Forest Department, Myanmar

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Presentation by Mr. Katsuto Shimizu, Kyushu University, Japan



Presentation by Daw Zar Chi Win, Forest Department, Myanmar



Presentation by U Thein Saung, Forest Department, Myanmar



Presentation by Mr. Yukio Wada and Mr. Naoki Mitsuzuka, Asia Air Survey Co.Ltd.

REDD+ AND SLM IN MYANMAR



Presentation by U Zaw Zaw, Forest Department, Myanmar



Presentation by Dr. Yasumasa Hirata, FFPRI, Japan

**Field Visit to Observe Elephant Logging Practice
and Forest Conservation Activities
in the ITTO REDD+ Project Area of the
Taungoo District**

**Field Visit to Logging Areas in the Taungoo District
Practiced by Elephant**



Field Visit to Logging Areas in the Taungoo District
Practiced by Elephant



Provision of Desks and Some Stationery to Elementary School of Zayepauk Village in the ITTO REDD+ Project Site, Yedashe Township, Taungoo District



Provision of Desks and Some Stationery to Elementary School of Zayepauk Village in the ITTO REDD+ Project Site, Yedashe Township, Taungoo District



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