Activity Report of SEApeat Project (Myanmar Component)

Title of the activity: Joint Peatland Assessment in Inle Lake Region

Objective of the activity

The objective of this activity was primarily to complete the peatland assessment and to observe the situation of peatland and peat soil in the Inle Lake region. The objective is also linked to the conservation of peatland forests in Southeast Asia by strengthening governance and developing incentives to promote integrated management, sustainable local livelihoods, reduce Greenhouse Gas emissions and conserve biodiversity.

Period: 15 to 28 February 2014

Location of the activity

Peat assessments were carried out by Joint Peatland Assessment Team comprising GEC, Regional Expert and FREDA in Inle Lake Region in Southern Shan State.

Number of participants/stakeholders involved

- 1. Mr. Faizal Parish, Director, GEC
- 2. Dr. Le Phat Quoi, Regional Expert (Vietnam)
- 3. U Sann Lwin, Secretary (Finance, FREDA)
- 4. U Myint Aung (Project Manager, SEApeat Project)
- 5. Daw Seint Sann Zaw (Field Manager, SEApeat Project)
- 6. U Naing Lin Oo (Field In-Charge, SEApeat Project)
- 7. Mr. David Abrahamson (Special Assistant, FREDA)
- 8. U Ye Wanna Soe (Forester, SEApeat Project)
- 9. U Chit Sann (Forester, SEApeat Project)
- 10. U Nay Linn (Forester, Inle Lake Wildlife Conservation Department)

Report

Joint Peat Assessment in Inle Lake

Under the arrangement of GEC and FREDA, Regional Expert Dr. Le Phat Quoi arrived in Yangon on 14 of February, 2014. Before traveling to Inle Lake, a special meeting was held on February 15 at the FREDA Office to discuss the preparation of the Peatland Assessment in Inle Lake. The assessment team headed by U Naing Lin Oo (Field In-Charge) left for Nyaung Shwe by bus in the evening of 15 February.

On 16 February, the team headed by Dr. Le Phat Quoi travelled to Heho by flight and arrived at Heho around noon. After that the team continued to Nyaung Shwe by car. On 17 February the team headed to Taunggyi by car to discuss the peatland assessment in Inle Lake with Myanmar State Forest Department officials.

The peatland assessment began on 18 February 2014 and ended on 22 February 2014 under the guidance of Dr. Le Phat Quoi. The team started the peatland assessment along Inle Lake by boat and on the first day assessed: **the middle channel of Thele U, Kyun Gyi Taung, Mwe Pway**

village, the middle channel of Lwe Nyein and Si Thar channel. In these above places, we collected six soil samples and measured the depth of the peatland. The thickest peat soil was 3.3m and the thinnest was 60cm.

On 19 February, the team travelled along Inle Lake by boat to the southern parts of the lake. The places visited were: Eastern part of Tharlay village, Inn Por Kone, Northern part of Yay Thar village Kan Koung channel, between the Sisone and He Lon village, Het Pone village, West of Lwe Maw monastery, Khait Khan village and between the Myay Shar and Pone Mu village (Kwin Woo). At the above places, the team only measured the depth of the soil and did not collect soil samples.

On 20 February, the team headed to Sakar Lake (which is situated in the Southern part of Inle Lake) by boat and measured the depth of peatland in near Thar Kaung, Eastern part of Thar Kaung, Thar lay village, He Yar village and Western part of Mwe Pwe village.

On 20 February, the team travelled along North-West and Western shores by car. In Pyar Pin Village, the team went along the lake by boat and measured the depth of Peatland in **Pya Pin village**, **South-West of Le Thit village**, **Northern part of He Yar village**, **Northern part of Kyun Sin Gyi and Inn Tain village**.

On 22 February, the team assessed the remaining area of Inle Lake: Pwe Sar Kone, Eastern part of the Khay Sar Kone village, Eastern part of the Minn Chaung village, Northern part of the Kyun Gyi village, Yay Me Pin village, between the Southern part of Kyun Gyi and Tha Byay Pin village, Eastern part of Tha Byay Pin, Western part of Tha Byay Pin, between Tha Byay Pin and Lal Thit village, inside the Tha Byay Pin village (Htain Pin), Western part of Tha Byay Pin channel, Nga Phe channel, Northern part of Kay Lar village, Eastern part of Kay Lar village, Southern part of Shwe Kyun Myawl Hotel, Northern part of Tha Le Oo, between the Mann Chaung and Tha Le Oo village and Eastern part of Tha Le Oo. The team only measured the depth of peatland there.

On 23 February, the team prepared for the Meeting on Peatland and Inle Lake Environmental Management which would be held in Nyaung Shwe.

On 24 February, Mr. Faizal Parish, Director of GEC and U Sann Lwin, Secretary (Finance), FREDA arrived in Nyaung Shwe and a preparation meeting was held in the afternoon.

On 25 February, Mr. Faizal Parish and the peatland team went to the Taunggyi in order to meet U Win Zaw (Director of the Forest Department, Shan State) to discuss the progress of Inle Lake conservation work and peatland assessment in Inle Lake region. After that the team visited a peat mound near Tang Bo Gyi village. Later in the evening, the team organized the meeting "Peatland and Inle Lake Environmental Management" in the INLELAKE ENVIRONMENTAL EDUCATION CENTRE, in Nyaung Shwe. Representatives from the UNDP, Inle Lake Wildlife Conservation Department, Irrigation Department, Land Record Department and Agriculture Department also attended that meeting.

On 26 February, the team led by Mr. Faizal Parish travelled along Inle Lake by boat, collected some soil samples and measured the thickness of peatland in the **Southern part of Kyun**

Gyi village, the Wildlife Sanctuary Area, Nyaung Wun village and Taung Poe Gyi. The team collected four soil samples.

On 27 February, Mr. Faizal Parish and the team travelled to the **Southern part of the Taung Bo Gyi village** by car and measured the thickness of peat mound which situated in Taing Bo Gyi Village. The thickness on the spring mound is 6.5m and the team collected the soil samples from every 0.5m of depth and 18 soil samples were collected. After that, the team headed to Heho Valley peatland and collected one soil sample.

On 28 February morning, the concluding meeting was held at the FREDA office with Dr. Le Phat Quoi and FREDA team.

Result and achievement of the activity

During this Peat Assessment, the team collected 29 soil samples and measured the depth of the soil along the southern part of the whole area. Three separate types of peatland were found during the assessment.

- 1. Lake-margin peatlands: situated along the shores of Inle Lake.
- 2. Floating peatlands: floating on the surface of the lake.
 - (a) natural floating peatlands.
 - (b) modified floating peatlands used as floating gardens for the cultivation of tomatoes and other vegetables.
- 3. Calcareous spring mound peatland found in Taung Bo Gyi Village in the northwest corner of the Inle Lake.

Recommendation

- Need more Best Management Practices on peatlands. Currently the government does not have any regulations for the management or conservation of peatlands in the Heho or Inle Lake regions.
- Create clear requirements to limit the encroachment of cultivation on peatlands.
- Keep secure excess water extraction from peatlands. Peatlands absorb large amounts of
 water and can be a water source all year-round such as the mound created by a spring in
 Tuang Bo Gyi. However excessive use and cattle grazing could slowly deplete this source.
 Fencing and community management could ensure the sustainability of this and similar
 peatlands.
- **Fire protection**. Our survey noticed that burnings are still being done year-round to clear fields and water pathways around the lake. Burnings threaten peatlands particularly those that have dried out.

Reported prepared by: FREDA Team

Date: 10th March 2014