

Training on Sustainable Basin Management in a Context of Climate Change

1. Course Title:

Training on Sustainable Basin Management in a Context of Global Change

2. Duration:

Year 2: 1st – 21st September 2021

3. Rational:

Lake and river basin provide essential services as freshwater resources in different purposes including water supply, irrigation, fishery, industry, stormwater drainage and recreation. Complex ecosystems of lake and river basin result in high biodiversity that support a variety of aquatic animals and indigenous plant species. Lake and river basin also provide agricultural and fishery resources for the cultivation of food and energy crops, animal husbandry, and coastal fishery. In addition, the cultural heritage of basin strongly provide the opportunity for tourism development as well. However, there are growing concerns about the deterioration of lake and river basins particularly in developing countries due to too much exploitation for supporting social and economic development. Various natural resources in basin have been used for economical benefits without enough conservation and restoration leading to the rapid deterioration of resources and also conflict relevant to the resources consumption and access ie. shallowing lake and river, lowering biodiversity, water pollution, water conflict, animals extinction etc. Moreover, in the past decades, there were increasing concerns about potential impacts caused by climate change and extreme weather on the basin. Climate change and their impact including extreme rainfalls, season changes and the associated natural disaster ie. flood, drought and landslide events are affecting ecosystem, human and food security, and economic losses in numerous basins in developing countries. Preventive measures and proactive preparation need to be considered to cope with these potential impacts.

Faculty of Environmental Management, Prince of Songkla University (PSU), in where Geo-Informatics and Space Technology Centre (Southern Region) is located, have more than two decades of experiences in research and knowledge management for sustainable Songkhla Lake Basin development. According to all background and rationale shown above, Faculty of Environmental Management and the 5 collaborative institutes of PSU (Geo-Informatics and Space Technology Centre-Southern Region, Marine and Coastal Resources Institute, Institute for Peace Studies, Faculty of Law, and Faculty of Economics) and also the collaborative Chiang Mai University jointly initiate this 2.5 weeks training course for capacity building the participants who are working in the fields of watershed management particularly in developing countries. After complete the training, the participants are expected to have the comprehensive knowledge and the skill sets to plan, design the policy and adaptive measures for sustainable lake and river basin management in a context of climate change.

4. Objectives

- Capacity building in sustainable lake and river basin management in a context of climate change including planning, designing policy and adaptation to climate change.
- Sharing knowledge and experiences in sustainable lake and river basin management as well as climate change adaptation among the developing countries
- Networking with the authorities, policy makers, and academics in the fields of integrated watershed management

5. Course Content:

| Day/Time | 09.00 – 12.00 a.m. | 13.00 – 16.00 p.m. |
|---------------------------------|---|--|
| Wednesday 1 - September - 21 | Welcome, Introduction Assoc. Prof. Dr. Kuaanan Techato, PSU Opening of the Training by representative from TICA Current status & future challenges in sustainable basin management Asst. Prof. Dr. Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Thursday 2 - September - 21 | Current status & future challenges in sustainable basin management (1) VDO presentation: @Faculty of Environmental Management, Price of Songkla University Asst. Prof. Dr. Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Friday 3 - September - 21 | Point and non-point sources pollution Asst. Prof. Dr. Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Saturday 4 - September - 21 | Official Holiday | |
| Sunday 5 - September - 21 | Official Holiday | |
| Monday 6 - September - 21 | Point and non-point sources pollution Asst. Prof. Dr. Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Tuesday 7 - September - 21 | Disaster risk reduction for sustainable basin management (2) VDO presentation: @ Chiang mai Dr. Phonpat Hemwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Wednesday 8 - September - 21 | Disaster risk reduction for sustainable basin management Dr. Phonpat Hemwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Thursday 9 - September - 21 | Sufficiency economy for sustainable basin management (3) VDO presentation: Klong Utapao @ Songkhla Province Asst. Prof. Dr. Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Friday 10 - September - 21 | Sufficiency economy for sustainable basin management Asst. Prof. Dr. Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Saturday 11 - September - 21 | Official Holiday | |
| Sunday 12 - September - 21 | Official Holiday | |

| Day/Time | 09.00 – 12.00 a.m. | 13.00 – 16.00 p.m. |
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| Monday 13 - September - 21 | Community-based sufficiency economy in practices (4) VDO presentation: Klong Utapao @ Songkhla Province Asst. Prof. Dr.Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Tuesday 14 - September - 21 | Community-based sufficiency economy in practices Asst. Prof. Dr.Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Wednesday 15 - September - 21 | Urban flood mitigation & Urban water pollution control (5) VDO presentation: Klong Utapao @ Songkhla Province Asst. Prof. Dr.Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Thursday 16 - September - 21 | Urban flood mitigation & Urban water pollution control Asst. Prof. Dr.Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Friday 17 - September - 21 | Marine conservation & Sustainable fishery in a context of climate change (6) VDO presentation: Koh yor @ Songkhla Province Asst. Prof. Dr.Narit Doungsuwan | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Saturday 18 - September - 21 | Official Holiday | |
| Sunday 19 - September - 21 | Official Holiday | |
| Monday 20 - September - 21 | Policy, Institution, Regulations & Incentives for sustainable basin management (7) VDO presentation: Koh yor @ Songkhla Province Assoc.Prof.Dr. Chatchai Ratanachai , Asst. Prof. Dr.Chanisada Choosuk & Asst.Prof.Dr.Jawaniit Kittitornkool | Country Report Assoc. Prof. Dr. Kuaanan Techato, PSU |
| Tuesday 21 - September - 21 | Conclusion Assoc. Prof. Dr. Kuaanan Techato, PSU | Closing Ceremony Assoc. Prof. Dr. Kuaanan Techato, PSU |

- **Advance Assignment**

Before arrival, each participant is required to prepare the 8 pages country report in which the 3 main parts are included: (1) Introduction (the socio-economic context of basin, and the significant or the importance of basin), (2) The lake or river basin (basic information, past and current environmental status), (3) Management and key challenges of the lake or river basin (current and future). Each country report will be presented by participants and discusses with the others on the first day of the training program.

- **Reading Assignment**

No reading assignment. Before arrival, however, participants should gather and prepare all necessary data and information which is helpful for complete their own project assignment.

- **Project Assignment**

Each participant is assigned to formulate the action plan to tackle key challenges of the lake or river basin management in their cases. Project will be assigned on the first day of the program and each participant is required to complete, give the presentation on the final day of the program.

- **Culture Assignment**

During the training program, each participant is encouraged to prepare and perform one show for cultural exchange activity.

6. Number of Participant

20 invited participants

7. Participant Criteria

- Junior government officer and junior researcher who has at least a bachelor degree and are responsible for (or are working with) the lake or river basin management and/or the lake or river water pollution management

8. Invited Country

Bangladesh, Bhutan, Cambodia, China, Egypt, India, Indonesia, Iran, Jordan, Lao PDR, Malaysia, Maldives, Morocco, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, and Vietnam

9. Venue

Songkhla: Klong Utapao, Koh yor, Songkhla Lake basin & BP Samila Hotel
Chiang Mai: Chiang Mai University

10. Expected Result

The participants will be able to apply the knowledge and experiences gained from training program for designing the action plan to solve their own challenges in lake or river basin management in the era of climate changes.

11. Evaluation

Complete the project assignment with attending >90% of total training period.

12. Institution

Funding will be supported by Thailand International Development Cooperation Agency, Ministry of Foreign Affairs.

13. Further relevant information is available at the following addresses:

Human Resource Development Bureau (HRD Branch 2)
Thailand International Development Cooperation Agency (TICA)
The Government Complex, Building B (South Zone), 8th Floor,
Chaengwattana Road, Laksi Bangkok 10210, Thailand
Tel.: (662) 2035000 ext. 43305 Fax: (662) 1439325
E-mail: boonmee@mf.go.th, sureeratp@mf.go.th

14. Institution

Faculty of Environmental Management, Prince of Songkla University
4 doctoral instructors in field of sustainable development, global warming and sustainable energy development

Contact Address and Person:

Dr. Kuaanan Techato,

Faculty of Environmental Management, Prince of Songkla University, Hat yai, Songkhla, Thailand 90110, Tel + 66-7428-6843

Email: kuaanan.t@psu.ac.th Website: www.envi.psu.ac.th

15. Expenditure

See attachment for the detail of budget.