INWEPF Newsletter No.2 January 2012

INWEPF

INTERNATIONAL NETWORK FOR WATER AND ECOSYSTEM IN PADDY FIELDS

1.Flow of **INWEPF's** *Activities*

The Steering Meeting, which is the managing body of the INWEPF and deciding on activities plan, has been held since 2004 and last the eighth Steering Meeting was held in Penang, Malaysia in 2011.

Ministerial Meeting on Water for Food and Agriculture on the occasion of the **3rd World Water Forum** in 2003, Japan

On the occasion of the 3rd World Water Forum, the Ministry of Agriculture, Forestry and Fisheries of Japan and the Food and Agriculture Organization of the United Nations co-organized the Ministerial Meeting on Water for Food and Agriculture on March 21, 2003.

INWEPF 1st Steering meeting in 2004, Japan

INWEPF 1st Steering Meeting and Inaugural Symposium was held in November 2004 and organized provisional working group in January 2005 to participate in "The Conference on Water, Food and Ecosystems" hosted by FAO/the Netherlands and spoke for the rice growing countries.

INWEPF 2nd Steering meeting in 2005, Korea

INWEPF 3rd Steering meeting

4th World Water Forum in 2006, Mexico

INWEPF and the Asia regional working group of ICID held the joint session entitled, "Sustainable paddy water use and its multifunctionality with better governance". INWEPF also announced "Message from INWEPF for WWF4"

INWEPF 3rd Steering meeting in 2006, Malaysia

Three working groups (Multiple Roles of Paddy, Vision Policy and Information Dissemination of INWEPF activities and programs, Monetary Assessment and Value Adding in the Multifunctional Roles of Paddy Fields) were established.

INWEPF 4th Steering meeting in 2007, Thailand

Virtual Meeting was implemented from September to October in 2007

Representative of INWEPF participated in panel discussion of the session together with selected members; ministers of Nepal and Fiji, Director of research institute in China and representative of FAO, IUCN and ICID.

1st Asia-Pacific Water Summit (APWS1) in 2007,Japan

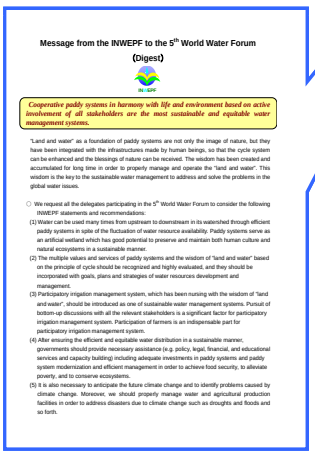
INWEPF organized the workshop on Ecosystem Services of Paddy-Irrigated Basin as an Open Event of APWS1, including people from FAO, ICID and so on. Finally, Message from INWEPF to the 1st Asia-Pacific Water Forum was introduced.

INWEPF 5th Steering meeting in 2008, Indonesia

INWEPF implemented the monetary assessment and value adding in the multifunctional roles of paddy fields regarding "1) Flood Control", "2) Prevention of soil erosion" and "3) Recharge of groundwater" with data of paddy fields collected from member countries, to develop understanding of the multifunctional roles of paddy fields.

5th World Water Forum in 2009, Turkey

INWEPF held the session with FAO, the theme "Water multi-tasking: how to obtain more benefits per drop from multiple uses and functions". In the session, INWEPF reported the result of monetary assessment and value adding in the multifunctional roles of paddy fields. And INWEPF also released the message from INWEPF to international community in the session



Message from the INWEPF to the 5th World Water Forum

(Digest)

Cooperative paddy systems in harmony with life and environment based on active involvement of all stakeholders are the most sustainable and equitable water management systems.

"Land and water" as a foundation of paddy systems are not only the image of nature, but they have been integrated with the infrastructures made by human beings, so that the cycle system can be enhanced and the blessings of nature can be received. The wisdom has been created and accumulated for long time in order to properly manage and operate the "land and water". This wisdom is the key to the sustainable water management to address and solve the problems in the global water issues.

○ We request all the delegates participating in the 5th World Water Forum to consider the following INWEPF statements and recommendations:

(1) Water can be used many times from upstream to downstream in its watershed through efficient paddy systems in spite of the fluctuation of water resource availability. Paddy systems serve as an artificial wetland which has good potential to preserve and maintain both human culture and natural ecosystems in a sustainable manner.

(2) The multiple values and services of paddy systems and the wisdom of "land and water" based on the principle of cycle should be recognized and highly evaluated, and they should be incorporated with goals, plans and strategies of water resources development and management.

(3) Participatory irrigation management system, which has been nursing with the wisdom of "land and water", should be introduced as one of sustainable water management systems. Pursuit of bottom-up discussions with all the relevant stakeholders is a significant factor for participatory irrigation management system. Participation of farmers is an indispensable part for participatory irrigation management system.

(4) After ensuring the efficient and equitable water distribution in a sustainable manner, governments should provide necessary assistance (e.g. policy, legal, financial, and educational services and capacity building) including adequate investments in paddy systems and paddy system modernization and efficient management in order to achieve food security, to alleviate poverty, and to conserve ecosystems.

(5) It is also necessary to anticipate the future climate change and to identify problems caused by climate change. Moreover, we should properly manage water and agricultural production facilities in order to address disasters due to climate change such as droughts and floods and so forth.

INWEPF 6th Steering meeting in 2009, Japan

Three working groups were reorganized ("Multiple Roles of Paddy Fields" ,"Vision, Policy and Information Dissemination on INWEPF activities and Programs" and "International cooperation and collaboration for sustainable paddy farming")from 6th INWEPF Steering Meeting 2009 to 6th World Water Forum in 2012 as a 2nd phase.

INWEPF 7th Steering meeting in 2010, Korea

For the preparation of the WWF6, task force team shall be formulated. The team is composed of 5 members: Japan, Korea, Malaysia, Myanmar and Thailand.

INWEPF 8h Steering meeting in 2011, Malaysia

Three working groups submitted reports respectively. ("Guidelines for monetary assessment of flood and sediment control in paddy fields" ,"Synthesis report on balance between production and environmental protection ","Guideline for PIM activities ")

2.*Present* **INWEPF's** *Activities*

●2nd INWEPF Task Force Meeting for WWF6

2nd INWEPF Task Force Meeting for 6th World Water Forum (WWF6) was held in Bangkok, Thailand on 4th August 2011.
At this meeting, task force members composed of Malaysia, Korea, Myanmar, Thailand and Japan discussed how INWEPF could contribute to WWF6 as followings.

- So as to reflect "Regional process" in WWF6, INWEPF will make presentations of our activities and release a message from INWEPF at APWS2.
- Each working group will make the presentation documents before the 8th INWEPF steering meeting which will be held in this November in Penang Island, Malaysia.

●Joint Symposium and The 8th steering meeting

INWEPF-MANCID(Malaysian National Committee on Irrigation and Drainage) joint symposium and the 8th steering meeting were held in Penang, Malaysia from the 1st to the 3rd November 2011 by INWEPF Malaysia Committe. Eleven persons made presentation and 128 persons attended at INWEPF-MANCID joint symposium under the themes "Sustainable Agriculture Water Use and Multifunction of Paddy Fields".
At the steering meeting, INWEPF decided as following.

- Host country of the 11th steering meeting in 2014: Pakistan
- INWEPF's Strategic Action Plan: 2011-2012

"INWEPF's Strategic Action Plan: 2011-2012"

○The target for the activities to accomplish the prioritization of four themes as "2nd phase"

"Promotion of sustainable paddy farming"

○The themes of the target for the activities as "2nd phase"

I. Functions and response of paddy farming of water, food and environmental problems
II. Development of understanding of paddy farming of the international community
III. Building partnership with international organizations which conduct technical cooperation projects

○WGs for the purpose of the achievement of activities' themes as "2nd phase"

WG1 : Multiple Roles of Paddy Fields
WG2 : Vision, Policy and Inform Dissemination on INWEPF activities and Programs
WG3 :International cooperation and collaboration for sustainable paddy farming

○Expected outcomes 2011-2012 of each WG

WG1:
1. Quantification or Evaluation of the value of multi-functionality at the model site
2. Dissemination of the result of the above, through HP

WG2:
1. Collection and compilation of the country reports and case studies of each country under the theme of 'balance between productivity and environmental protection'
2. Dissemination of the result of the collection and compilation as form of a case study

WG3:
1. Collection, arrangement and classification of cases of INWEPF related activities of PIM
2. Compilation of the result the activities of 1and dissemination through Homepage

●WG1（lead ：INWEPF Malaysian Committee）

“Guidelines for monetary assessment of flood and sediment control in paddy fields”

Multifunctionality & Environmental Services of Paddy Fields

The multiple roles of agriculture include food security, maintaining and ensuring viability of rural communities and environmental protection, such as land conservation, sustainable management of renewable natural resources, preservation of biodiversity, landscape, etc.

Flood control monetary assessment

The material computation for monetary value for flood control of Paddy fields is below.

$$MV_{FC} = [(FV_{RC} + FV_{TS}) \times UC_{FC}] - MV_{CD}$$

MV_{FC} =Monetary value for flood controlfunction of paddy field, USD/yr

FV_{RC} =Function volume for retention capacity, m^3

FV_{TS} =Function volume for temporary storage, m^3

UC_{FC} =Unit flood control cost, USD/m^3/yr

MV_{CD} =Monetary value for crop damage or compensation, USD/yr

Sediment control monetary assessment

The material computation for monetary value for sediment control of Paddy fields is below.

$$MV_{SC} = FV_{SC} \times UC_{SC}$$

MV_{SC} =Monetary value for sediment control function of paddy field, USD/yr

FV_{SC} =Function volume for retention capacity, m^3/yr

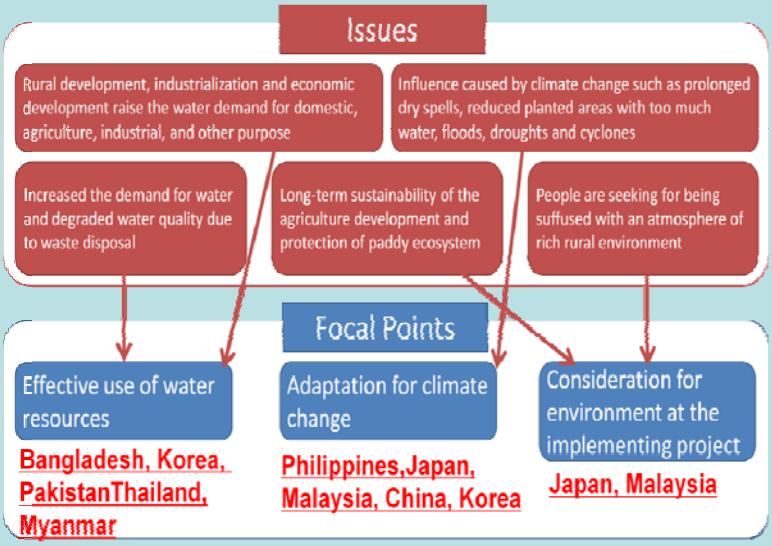
UC_{SC} =Unit sediment control cost, USD/m^3

●WG2（ lead ：INWEPF Korean Committee）

“Synthesis report on balance between productivity and environmental protection”

Analysis from case studies (Asian countries)

Particularly some key points of INWEPF member countries toward sustainable agriculture can be broadly categorized into three focal points “Effective use of water resources”, ”Adaptation for climate change” and “Consideration for environment at the implementing project”.



Three principles

- ◆ Accelerating efficiency in use of irrigation water
- ◆ Preserving natural environment surrounding paddy fields
- ◆ Contribution to mitigating climate change

●WG3（ lead ：INWEPF Japanese Committee）

“Guideline for PIM activities”

Benefits/objectives

The major benefits/objectives of PIM in the Asian monsoon region is follows.

- **・Increasing efficiency in the use of water resources**
- **・Increasing the degree of freedom in water control at the plot level**
- **・Water saving**
- **・Equitable water allocation**
- **・Ownership of famers**

Important points for PIM activities in the future

To solve problems and strengthen PIM and spread sustainable development of paddy cultivation, following items should be noted.

- **・Promoting farmer participation: how to motivate farmers**
- **・Organizing WUO(water users organization)’s and promoting their activities**
- **・Government financial support**
- **・Capacity building of famers and government employees**
- **・How to proceed with the project and management with famer participation**

3. *Introduction of* **INWEPF's** *Member countries -Malaysia-*

1. Visit to institute Bumbung Lima Irrigation Scheme, 27th Feb. 2011

In conjunction of 16th MANCO, MANCID also has organized a site visit to Institute Bumbung Lima Irrigation Scheme at Integrated Agriculture Development Area (IADA) Kerian, Perak. Concerning for multi-purposed agriculture activities especially for paddy farming and aquaculture activities, INWEPF Malaysia delegates had joint the visit to understand more about the multi-function use of paddy field.

2. 1ST INWEPF task force meeting for WWF6, Malaysia, 3rd Mar. 2011

Follow up of the 7th INWEPF Steering Meeting at Jeju Island, Korea, INWEPF Malaysia had organized 1st INWEPF task force meeting for WWF6. Five countries (Japan, Korea, Malaysia, Thailand and Myanmar) were selected for preparation INWEPF activities for coming WWF6. The meeting was participant by 19 members countries representative (Japan-4 persons, Korea-3 persons, Malaysia- 7 persons, Thailand-3 persons, Myanmar-2 persons).

3. MANCID – Sime-Darby "KNOWLEDGE SHARING PROGRAMME " ,14th Apr. 2011

INWEPF Malaysia delegates had participant the technical visit to Sime Darby cooperation a local private company who had invest in estate paddy farming. The event was organized by young professional MANCID and co-organized by Division of Irrigation and Agricultural Drainage MOA. The total participation was above 30 people, and the objective of the visit were knowledge sharing and study the private investment in paddy farming as well as new technology adaptation.

4. Cooperation technical visit to Huai Hongkrai Royal Project, THAILAND ,2nd Jun. 2011

In June 2011, Division of Irrigation and Agricultural Drainage MOA coordinate with INWEPF Malaysia was privileged to hold a co-operation and technical visit to Huai Hongkrai Royal Project, Royal Irrigation Department Thailand. We are thankful to the INWEPF Thailand Committee for securing space in the timetable for organizing the fruitful visit. The technical visit was attended more than 25 participants from Malaysia delegates lead by Secretary INWEPF Malaysia, Mr. Mohd Yazid bin Abdullah.

5. Field survey at LAEM PHAK bio-study research and development project, INWEPF working group 1 meeting and 2nd INWEPF task force meeting for WWF6, THAILAND , 31st Aug. - 4th Sept. 2011

A field survey was conducted by INWEPF Thailand Committee which had proposed on previous working group 1 meeting at Jeju, Korea. More than 7 countries and over 13 peoples participated in the program. In conjunction of the field visit, INWEPF Working Group 1 meeting lead by Malaysia was held on 2 September 2011 to address and updated status of countries members working task. The general guild line of working task was drafted and targeted arise issues by country member for the coming next steering meeting.