Case title :Water Licensing & the Strengthening of Watercourse Water User Groups, Myanmar #310

Subtitle: Equal and efficient irrigation water distribution and maintenance of Watercourse.

## **Irrigation Performance**

The Irrigation Department in the Ministry of Agriculture and Irrigation has encouraged many farmers to organize water users groups for the irrigation projects as part of a pilot programme. The aim is for higher agricultural productivity and yield through the collaborative, active and efficient participation of beneficiary farmers engaged in irrigation water management. This is being achieved by reducing water losses, extending the equal and efficient irrigation and increase the cropping intensity and yield.

Now the Irrigation Department wants to extend the water user groups to cover every watercourse irrigation system throughout the country. This is being done in order to promote sustainable development. This is being done by demonstrating how such groups can help to address their problems. Extension staff from the Irrigation Department found that the main IWRM tools shown in the following section could be used for this purpose in Myothit township, Magwe division.

## Main IWRM Tools

#### C.3. Demand Management – using water more efficiently

- C.3.1 Improve efficiency of use
- C.3.3 Improved efficiency of supply

# C.4 Social Change Instruments

- C.4.2 Communication with stakeholders
- C.4.3 Information and transparency for raising awareness

#### C.5 Conflict Resolution

- C.5.1 Conflict management
- C.5.2 Shared vision planning

### C.6 Regulatory Instruments

- C.6.2 Regulations for water quantity
- C.6.3 Regulations for water services

#### C.7 Economic Instruments

C.7.4 Subsides and incentives

## C.8 Information Management and Exchange

C.8.1 Information management system

#### **Description**

#### Problems

- The watercourse water user group farmers do not want to be the group leaders of farmers belonging to their tertiary canals because they cannot perceive any direct benefits for the hard work involved with dealing with the general affairs of the watercourse.
- Water user groups at the township and the secondary canal level face the difficulties of having appropriate information exchange, inefficient supply and use of irrigation water in watercourse irrigable areas, and maintenance of terminal facilities such as watercourses and field channels.

#### Countermeasures

In the new system the group leaders will be nominated by the farmers, following elections among the beneficiary farmers of the watercourse, and then approved by the Divisional Canal Officer.

Water user groups at the township level have introduced a system for irrigation water supply which uses water tickets. Irrigation Staff (Canal Inspector) issues water license books to each leader with office seal and his signature (see annex 1).

The leaders and farmers should then sit a meeting to discuss the rotation and volume of water to use, the duration of irrigation (in days and hours) for each plot, the holders based on the location and soil condition of plots and the holders. After the discussion and decision-making meeting they make a memo for the distribution of irrigation water for each plot, recognition of the holders of the watercourse and irrigation water charge per hour. The meeting memo is approved by the relevant water user groups.

According to the meeting memo and farmer' requests, the leader issues a copy of the water license to each farmer or holder. The license includes the volume of water to take, the total number of days and hours to irrigate for each irrigation (land preparation, pounding etc.) with specific date according to the rotation decided. The leader keeps the original copy of water license to record for monitoring purposes, and to apply the agreed irrigation water charges. Anybody from the township or secondary canal water user group, Irrigation Department staff, village peace and development council, or other beneficiary farmers can check license holders are irrigating according to the water ticket or not.

If somebody is found to be irrigating without a water license or not according to the water license, the election of a new group leader can be requested by the water user group. The former leader and concerned farmer should be punished according to canal act or have a serious warning.

Leaders of watercourses should make proper use of the collected irrigation water charge for their labour; operation and maintenance of watercourse; and handling the general affairs of the watercourse - according to the decision by beneficiary farmers at the meeting and approved by township level water user group. Leaders of watercourse also have the opportunity to access water free of charge and with first priority.

#### Results

Both of the leaders and the beneficiary farmers are satisfied with the water licensing system to help organise irrigation. Farmers, water users' groups at the secondary canal level or tertiary canal level, and Irrigation staff have open access to information, and enjoy equal and efficient water distribution in throughout the managed watercourse. Farmers can irrigate according to a proper irrigation and operation plan and get the irrigation water to their plot smoothly. Finally they can reduce their working hours in their paddy fields and waste of irrigation water through proper irrigation management is reduced.

#### Lesson Learnt

Proper strengthening of the watercourse water user groups is very important, in order to have equal and efficient irrigation to each and every paddy plot. It can be done through the monitoring and evaluation of the activities and functions, as a way for appropriate strengthening of their activities and functions for the purpose of establishing of strong leadership and management system. The strengthening of the watercourse water user group in Myothit Township, Magwe Division is a good example and it should be extended to other areas and irrigation projects.

#### Importance of case for IWRM

Now, most of the irrigation systems in Myanmar have water user groups at different levels especially in dry zone area projects. Strengthening of water user groups enhances the active and efficient participation of farmers, in order to establish a successful water management system for sustainable development. It is a good example of the application of some of the principles of IWRM and could be used for first step in sustainable institution of water management.

# Keywords: water licensing, monitoring, election, irrigation water charge, water user groups

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### Signed By

(Leader of Watercourse)

(Member of WUG)

# **Regulations for Irrigation from Watercourse**

- 1) Should follow the Canal Act.
- 2) Should Irrigate with this Ticket.
- 3) Should be efficient Use of Irrigation Water.
- 4) Should Use Field Channel between plots to avoid plot to plot irrigation.