

Tapping the Benefits of Water Hyacinth

Locals look at the aquatic weed as an opportunity instead of a problem.

Background

Water hyacinth grows ubiquitously in water bodies in the tropics. If allowed to propagate without control, it can cause deterioration of water quality and create problems to water users. Locally known in Thailand as *pak tob cha wa* or "java weed", this plant is a major aquatic weed which doubles its size in less than two weeks and will completely cover the surface of rivers, lakes and canals, crowding out native flora and fauna and clogging boat motors.

From Weed to Fertilizer and Floating Garden

In Pak Phanang, Nakhon Sri Thammarat, local communities view water hyacinths as a blessing instead of a problem since these have given them alternative livelihood opportunities aside from farming and fishing. CORIN-Asia facilitated communities to utilize water hyacinth into organic fertilizers. This aquatic weed found along the waterways of Pak Phanang River Basin weigh more than 500,000 tons which can be converted to several tons of organic fertilizers for agriculture. To mass produce fertilizer, local communities have developed a water hyacinth processing center with the assistance from CORIN-Asia.

This venture has also made the group to look into other ways of utilizing water hyacinth. One such innovation is the creation of vegetable floating gardens using water hyacinth as its substrate. Vegetable floating gardens are a new option for self-sufficiency of the community in Pak Phanang River Basin. Vegetables such as cabbage and morning glory are usually

cultivated on floating beds made of compacted water hyacinths.

Tapping Other Potentials

In addition to floating gardens and fertilizers, water hyacinth is also explored as a good raw material for paper making. Pilot production is being done to compare it with other raw materials such as pineapple and sedge. Once successful the community, particularly the vulnerable groups such as women and the elderly, will be trained with the techniques from this paper-making activity. Aside from paper making, dried water hyacinths were utilized as an input for biogas production.

Aquatic Weed Management Learning Center

Through this opportunity, CORIN-Asia has also facilitated the establishment of a Learning Center to transfer

knowledge to other areas in the river basin and create opportunities to the community for additional income and alternative source of livelihood. Members of the learning center are trained to increase their capacity to apply what they have learned. They are involved in various activities such as training about organic fertilizer, soil specialist volunteer, teaching school children, and fertilizer processing. This center provides the community an opportunity to work closely with the local government agencies, research centers, and educational institutions.

Following the mission of CORIN-Asia, this effort has not only produced alternative jobs and additional income for the local people but also assisted the government and the local authorities in their task of reducing this aquatic weed in the waterways.



Water hyacinths, which grow abundantly in Pak Phanang, are converted into low-cost organic fertilizers as an alternative to the chemical ones.