

Promoting Eco-friendly Agricultural Practices in the Chanda *Beel* Area

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Foreword

Wetlands of Bangladesh support a wide range of flora and fauna, but indiscriminate uses of these resources have led to their decline over the decades. A preliminary survey found that the most dominant occupation in the Madhumati floodplain in Gopalganj-Madaripur districts was agriculture. Therefore an important activity under the Community Based Floodplain Resource Management project, a component of the Sustainable Environment Management Programme (SEMP), was to study the agricultural practice of the project area. Agricultural practices have changed over the years considerably to increase production. High yielding varieties and chemical fertilizers have replaced the local varieties and compost respectively. This has posed to be a serious environmental concern and the main objective of the project is to reverse this degrading trend by involving the local people in the sustainable use of their resources. For this, it is important to appreciate the local people's indigenous knowledge and disseminate it for wide-scale use.

The objective of this study is to document the existing agricultural practices and indigenous knowledge of the farmers, and design activities based on the strengths and weaknesses identified. Under the project, a series of activities were designed to promote environment-friendly techniques for farming. In addition, the indigenous technique of cultivating seedlings on a platform of water hyacinth was found extremely useful and was thus promoted throughout the project area.

This report is an inventory of the existing agricultural practices of the Chanda *Beel* area and the various ways people can use natural ways for farming. It gives clear indication of the drawbacks of the current farming system and the justification for each activity promoted along with their impact on the environment. Therefore, this report would be useful as a reference for future interventions related to agricultural practices.

Dhaka
October 2005

Ainun Nishat
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IUCN Bangladesh, in association with Bangladesh Centre for Advanced Studies (BCAS), has been implementing the Community Based Floodplain Resource Management Project (SEMP component 2.2.1/B) in the Madhumati floodplain in Gopalganj-Madaripur districts since late 1998. One of the activities under the project was to understand the agricultural practices of the area and promote environment-friendly techniques to prevent further degradation of the area.

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Dhaka
October 2005

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Abbreviations, Acronyms and Local Terms

<i>Amon</i>	Rice planted before or during the monsoon beginning in July-August and harvested in November
<i>Aus</i>	Rice planted during March-April and harvested during July and August
<i>Baira</i>	A form of hydroponics where plant materials, mainly aquatic, are used to construct thick floating platforms on which vegetables and other crops are cultivated, and seedlings are raised in rainy season
<i>Beel</i>	A saucer-shaped depression, which generally retains water throughout the year
<i>Bigha</i>	A local unit of land measurement; 1 <i>bigha</i> = 52 decimals
<i>Boro</i>	Winter rice planted in December-January and harvested before the onset of monsoon in April-May
<i>Haor</i>	A back swamp or bowl-shaped depression located between the natural levees of rivers and may contain a number of <i>beels</i>
IPM	Integrated Pest Management
IRRI	International Rice Research Institute
<i>Khal</i>	Bangla term for a drainage channel or canal usually small, sometimes man-made
<i>Kua</i>	The deeper site in the flat agricultural fields that continue to carry water during dry periods
<i>Maund</i>	Local unit of weighing; 1 <i>maund</i> = 36.4 kg
NGO	Non Government Organization
PAPD	Participatory Action Plan Development
PRA	Participatory Rural Appraisal
SRDI	Soil Resource Development Institutes
<i>Upazila</i>	The lowest tier of formal administration; formally known as <i>thana</i>
Vermicompost	Preparation of compost through culture of earthworms
VRMC	Village Resource Management Committee