

## P-07

## In Situ Conservation of Traditional Rice Varieties of Uttara Kannada

Gayatri H. Naik, M.D. Subash Chandran and T.V. Ramachandra

Energy & Wetlands Research Group, Centre for Ecological Sciences, Indian Institute of Science Bangalore – 560 012, INDIA

E-mail: gayatri@ces.iisc.ernet.in; mds@ces.iisc.ernet.in; cestvr@ces.iisc.ernet.in http://ces.iisc.ernet.in/energy

Before the start of Green Revolution there were over 100,000 native varieties of rice in India. These were the results of selection and propagation by the indigenous farmers through 5000 years of efforts. It is feared that over the last few years, due to the introduction of high yielding new varieties from elsewhere and hybrids bulk of Indian varieties have gone extinct. This is unbelievable loss for the gene pool of rice, prime staple food-grain of the world. There is still hope that through field surveys, especially in places of high landscape heterogeneity, the remaining native rice varieties can be located in farmers' fields and saved from extinction through promotion of in situ conservation. As a preliminary exercise we carried out a field survey in about 300 villages of Uttara Kannada to prepare an inventory of rice varieties grown, through interviews with the farmers. Data was gathered also about the notable characteristics and desirable features of these varieties. Out of about 178 rice varieties inventorised about 95 were native varieties. Most of these are taller to hybrids and other new varieties, over 5-6 in height and yield more fodder for cattle. Though their yields are relatively lower they have more resistance to pests and diseases. Their grains are bolder and longer and the rice comes in white, red and brownish colors. Some like Sannakki and Jeerigesali are fragrant. Doddabatha and Kagga are good for making rice flakes. Chitagya, Doddagya, Halaga, Hasadi etc. are attributed with medicinal properties. Salinity tolerance is found in Bilikagga and Karikagga grown in estuarine fields. Lot of choice exists for selection of rice of different durations, such as Jaddubatha and Kannuru of 90-100 days, Bantwala, Mullarya and Mysore Sanna of 100-120 days, Dibanasale of 120-140 days and Aloorsanna, Honnekattu etc. needing over 140 days. Long duration varieties are good for places with prolonged rainy periods and short duration for lower rainfall areas and irrigated fields. As most of native varieties are grown with organic manure and least or no use of pesticides they are good for human health and their fields ideal for fishes and frogs and other aquatic fauna as well as for birds which feed on them. In this poster GIS maps on the distribution of the native varieties are given along with pictures of many of them. The poster highlights the need for encouraging the growers of native varieties through honouring them and providing subsidies for conservation of rare ones.

