

[6] Indian Domestication of Rice: the Story from Orissa, East India, and the Development of Rice Cultivation Systems

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Archaeobotanic evidence from Orissa, East India, suggests that the area played an important role in the development of the domestic rice crop and its cultivation. Rice (*Oryza sativa*) was domesticated within the Gangetic plains of Northern India between c.6000 BC and 2000 BC. Early finds of rice from mounded settlement sites in Orissa date to c.2000 BC. By c.1500 BC secure archaeobotanic evidence shows that rice had become part of a mixed agricultural system incorporating Indian pulses. Subsequently, the spread of rice cultivation, particularly into Central India, appears to be associated with large scale irrigation works. This suggests that the development of irrigated rice agriculture may have occurred in Orissa. Recent research as part of UCL's Early Rice Project (ERP) has focussed on identifying the rice cultivation systems used in prehistoric Orissa through macrobotanic and phytolith assemblages. Using associated weed assemblages, the development of rice agriculture in Orissa has been analysed, tracing the trajectories of cultivation from initial exploitation, through a refinement of the rice crop and subsequent agricultural intensification.