



# Research Directions

Office of Research Services

*Villagers at work constructing a 'seepage tank', a water harvesting device*

## ***Better Cropping for the East India Plateau***

**Professor Peter Cornish, School of Natural Sciences, is undertaking research to produce better cropping systems for small farmers on the East India Plateau. Funding is being provided by the Australian Centre for International Agricultural Research (ACIAR).**



The East India Plateau covers much of the state of Jharkhand, parts of West Bengal, Bihar and Orissa. The region is characterised by high but variable rainfall, frequent dry spells during the monsoon, little irrigation with high water run-off, and soil erosion.

The aim is to develop and then evaluate a village-scale project to provide the foundation for agricultural growth and poverty alleviation. 'Water harvesting will be improved by using a variety of small structures to check and direct the flow and increase the amount of water captured in surface tanks and shallow aquifers for later use by plants via irrigation. 'The work will be carried out in three villages in two stages starting with the development of water harvesting principles and new crop options and cropping systems, followed with their implementation in a test area that will be monitored and evaluated' said Professor Cornish.

The successful application of this research will improve food security and income for some of the poorest farmers in India, who will be less dependent on poorly paid or distant off-farm work during the dry season, improving social cohesion. Through the cropping of additional types of vegetables and pulses the villagers' diet will be greatly improved.

The environment will also benefit from the control of the water supply because it will lead to a revegetation of degraded uplands, reduce soil erosion and reduce pressure on people to crop uplands, which may reduce flood peaks in the future.

Funding has been set at \$1,485,840.

**Project Title:** *Water harvesting and better cropping systems for the benefit of small farmers in watersheds of the East India Plateau.*

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