

4.1 UK Research Excellence Framework Impact Case Study: Sustainable farming and food security in China and India

Insights from historical archaeology inform today's food security agenda Research in the Department of Archaeology at the University of Cambridge has shown the importance of past agricultural practices, especially cultivation of hardy, adaptable millets and use of sustainable water management practices, in semi-arid regions of Asia. The work in China demonstrated how millets could contribute to rural population nutrition, food security and generate income. Inclusion as a Case Study in the 2021 REF submission represents a major recognition for these research outputs and formed a vital element in the success of the University's submission

Field research activities identified archaeological remnants of water storage systems for restoration "In India, the work supported in part by the TIGR²ESS programme, the researchers have particularly focussed on how rural populations adapted their farming practices to survive in variable and changing environments. This diversity appears to have been resilient to short-term crises and enabled long-term sustainability.

In collaboration with partners in India, the project is encouraging the importance of millet as a drought-resistant crop and promoting efficient water management, like the renovation of historic ponds, to enhance the sustainability of farming practices that are today on the edge of crisis due to depletion of groundwater from aquifers.



"The insights... from the Cambridge visit encouraged me to organise a workshop on village ponds and water bodies... [which] served to introduce these new insights into India's recent and deeper past to civil servants, policymakers, and stakeholders... who will now be able to work together to identify strategies for renovating village ponds across Punjab, so that they produce a sustainable and manageable water source."

Chief Principal Secretary of the Chief Minister of Punjab (and TIGR²ESS Policy Fellow)



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