# Developing a catchment management template to mitigate non-point source pollution in China

UK-China Sustainable Agriculture Innovation Network

## Objectives

To develop a catchment management template using bioregional planning to provide guidance on how to implement appropriate land use and land and water management. The template will integrate process, governance and science, enabling an assessment of necessary data and analytical tools to develop a plan, together with supporting stakeholder engagement, education programmes, economic incentives, regulatory instruments and governance arrangements.

## Main Activities

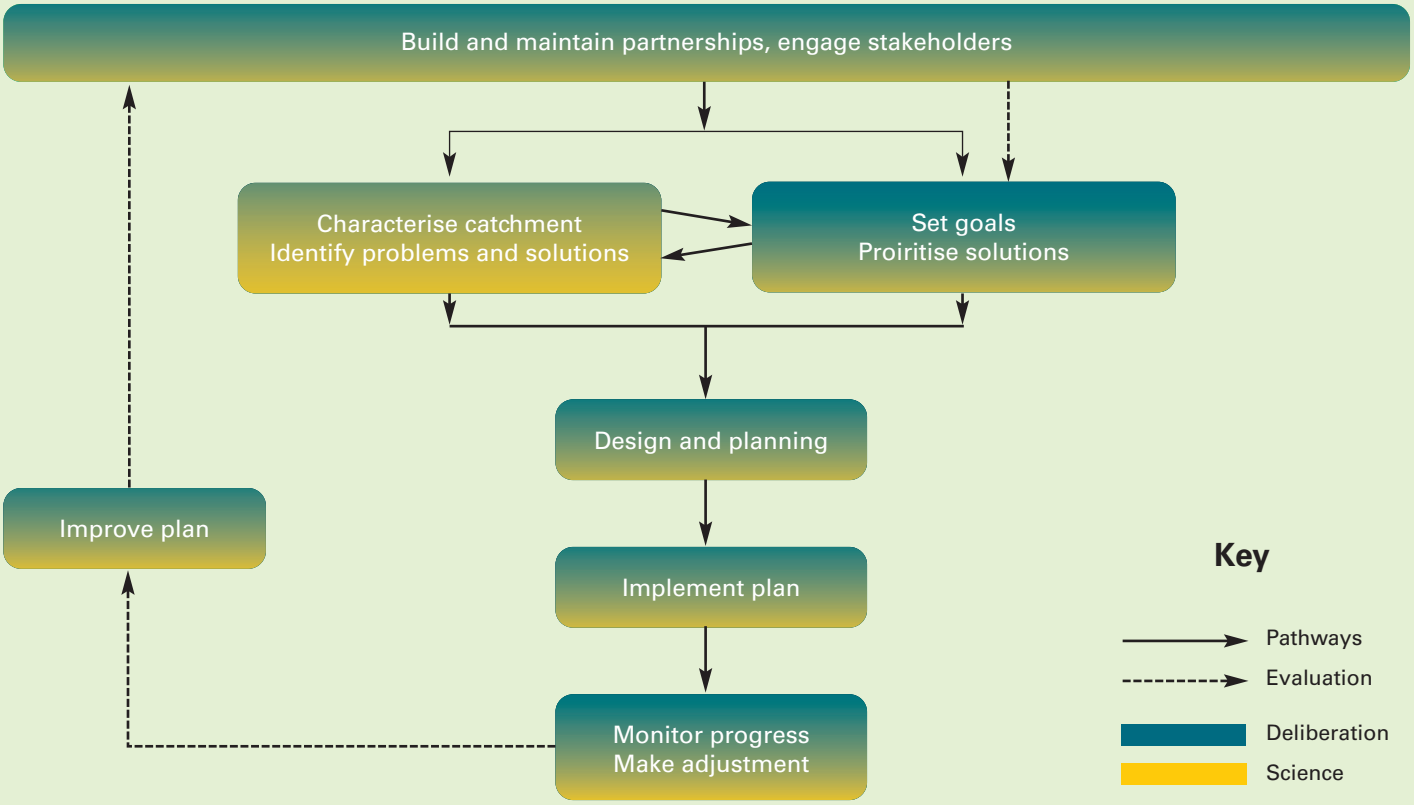
- A literature review of the principles and experience of circular agriculture in the UK and China
- A review of the state of nitrogen, phosphorous, organic matter, sediment and pesticide pollutant levels
- An assessment of the current availability of soils, geology and hydrogeological maps (including resolution) in China for use in assessing the vulnerability of surface and ground waters and for targeting land management measures
- A review of the risk assessment and modelling tools available for pollutant source identification and apportionment to inform targeting of remedial action
- A review of policy tools currently used to combat non-point pollution including economic incentives, regulation, extension advice, community-based conservation and spatial planning
- A review of implementation needs and existing capacity
- Development of criteria to assist in the selection of three test catchments for further study
- A study visit to the UK from China for exposure to catchment management and best practice farming initiatives.

## Expected output

- Exchange of professionals and academics between UK and China
- Enhanced capacity in both countries to meet this challenge in future
- A mapping of the ways and means required for a catchment management template
- Reports and publications reporting the outcomes of the scoping study.

## Expected Outcome

- An innovative framework linking circular agriculture, other farming best management practice for pollution mitigation and landscape management as a control strategy for diffuse and small point source pollution problems in intensive farming areas
- For international development agencies including DFID a catchment management template of relevance to increasingly demanding land and water protection challenges across many developing countries
- Understanding of urban and rural flows of biomass, waste, pollutants and energy from China to inform UK approaches
- Enhanced capacity in China and UK to meet the challenges of climate change.




Adapted from EPA Handbook for Developing Watershed Plans to Restore and Protect Our Waters, EPA 841-B-08-002, March 2008

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