

Food and Agriculture Organization of the United Nations

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# Climate Resilient and Environmentally Sound Agriculture (C-RESAP) in China



Experience from the China Climate Change Partnership Framework

Food and Agriculture Organization of the UN Ministry of Agriculture, China Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, China



# The need for resilient and environmentally sound agriculture

- Adaptation fundamental to ensure food security
- Adaptation + other environmental concerns
- China's Climate Change Strategy
- Particularly important for the Yellow River Basin



# Climate Change Partnership Framework

- 3-year programme, funded by the Spanish MDG Achievement Fund
- 10 Chinese institutions, 9 UN agencies
- Example of "One UN" project
- Agriculture component: adaptation + mitigation



# **C-RESAP**

- Strategies and farming systems that:
  - maximise production
  - minimise emissions and waste
  - preserve the resource base and ecosystem services
  - produce safe agricultural products
  - in the context of predicted cc scenarios and observed historical trends
  - integrate different disciplines



# **Project goals**

- Develop and test strategies
- Train farmers, field technicians, authorities
- Collect and disseminate practices
- Four proposals for "provincial actions plans"
- Experience could serve as example for replication in other areas



# **Project approach**

- Ecosystem perspective
- Adaptation + mitigation
- Multisectoral (multidisciplinary teams)
- Involving actors in adaptation planning
- Testing different agroecosystems
- Information sharing



## Partners at different levels

- Authorities from counties and cities: Dali, Mengjin, Zhangqiu, Yuncheng, Shouguang, Yanshi, Jingyuan, Wuzhong, Shizuishan, Qingtongxia.
- **Province institutions** Ningxia Development and Reform Commission, Northwest Agriculture and Forestry University, Luoyang Academy of Agricultural Sciences, Shandong Academy of Agricultural Sciences.
- National institutions (project management) Ministry of Agriculture (MOA), Institute of Agricultural Resources and Regional Planning (IARRP), Chinese Academy of Agricultural Sciences (CAAS).
- **Multidisciplinary teams** MoA, IARRP-CAAS, Institute of Environment and Sustainable Development in Agriculture (IEDA), CAAS; Institute of Agricultural Economics and Development (IAED), CAAS; Institute of Soil Science, Chinese Academy of Sciences (CAS), Institute of geographic sciences and natural resources research, CAS; Renmin University of China; Rural Development Institute, Chinese Academy of Social Science; China Agricultural University; Nanjing Agricultural University.





- Multidisciplinary teams
- Information system
- Development of manuals on C-RESAP
- Collection of 50 C-RESAP practices
- Training at different levels
- Demonstrations in 13 pilot sites



# What we expect to remain after project

- Functional multidisciplinary teams
- An information system
- Capacity to develop C-RESAP plans
- Four provincial action plans
- Capacity to transfer knowledge
- An approach to use in similar areas



## **Scaling-Up Activities**

- Extend training in the same provinces
- Extend demonstrations in the same provinces
- Using the approach in other provinces
- In collaboration with IARP, CAAS assist other countries in the region





## Information system

 Web-based information system (IS) prepared (http://www.cpesap.com)

#### homepage



#### project background





- 2<sup>nd</sup> round of training for field technicians and farmers held in Henan, Ningxia, Shaanxi and Shandong from May to June 2010.
- A total of 160 technicians and 640 farmers attended training on impact of climate change to agriculture and best management practices





• 3<sup>rd</sup> round of training aims to strengthen farmers awareness and capacities towards climate change and adapting the agricultural sector.

• 490 farmers from Henan, Ningxia, Shaanxi and Shandong participated the 3<sup>rd</sup> round of training.





## **Training manuals**

• Training topics from *impacts of climate change* on agriculture to key adaptation technologies.

 Training manuals for field technicians and farmers were developed.





## **Demonstrations**

- Pilot testing and demonstration (incl. organizing farmers, planting and monitoring) of C-RESAP practices implemented in 13 pilot sites.
- 130 farmers directly participated demonstration.
- Demonstration reports for season 1 finished.







## **Joint Implementation**

- All capacity building and training materials are jointly developed and reviewed by FAO, CAAS and local partners
- Plan to participate in workshops organized by the other Agency in YIII and share experts pool in concerned disciplines where appropriate.



## **Remaining activities**

- Revision and edition training manuals for authorities and field technicians;
- Updating and managing information system;
- **Provincial action planning workshops** with farmers, field technicians and local authorities in 4 project provinces to find actions to enhance the resilience of farmers and the agriculture sector to climate change.
- Drafting **provincial action plans** based on previous work like the situation analysis, the training activities, action planning workshops discussion etc.



## For more information

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