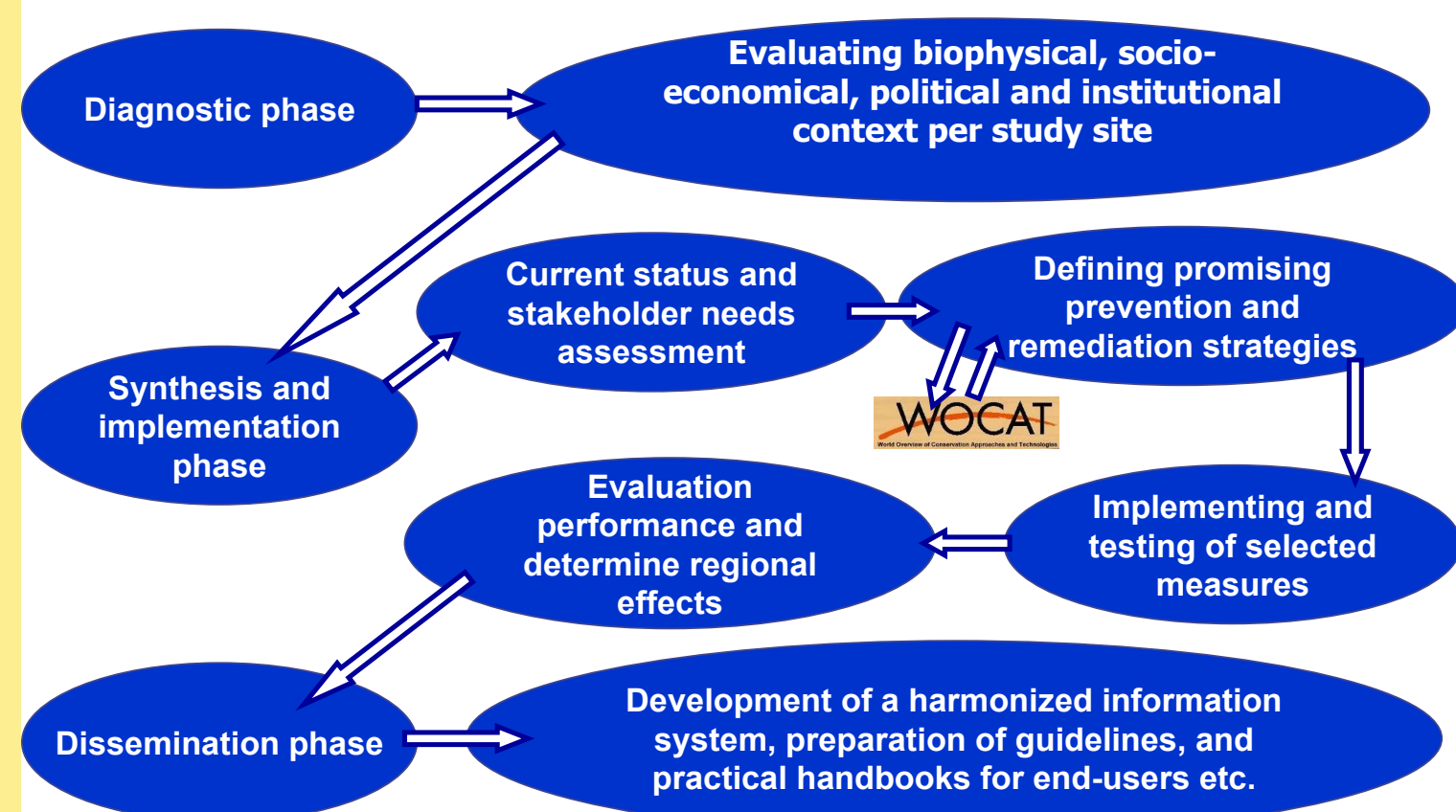


# DESIRE: Desertification mitigation and remediation of land - a global approach for local solutions

## Monitoring Progresses in Yan River Basin, China

### Why monitoring?



To confirm the integrated impacts of different technologies and land use on natural resources;

To test and explain the benefits of selected technologies from WOCAT-DESIRE process;

To show the differences of technologies for the local farmers; and

To find something new, interesting and possible that has not been mentioned in the concern stages of DESIRE all the time.

### Who monitoring?

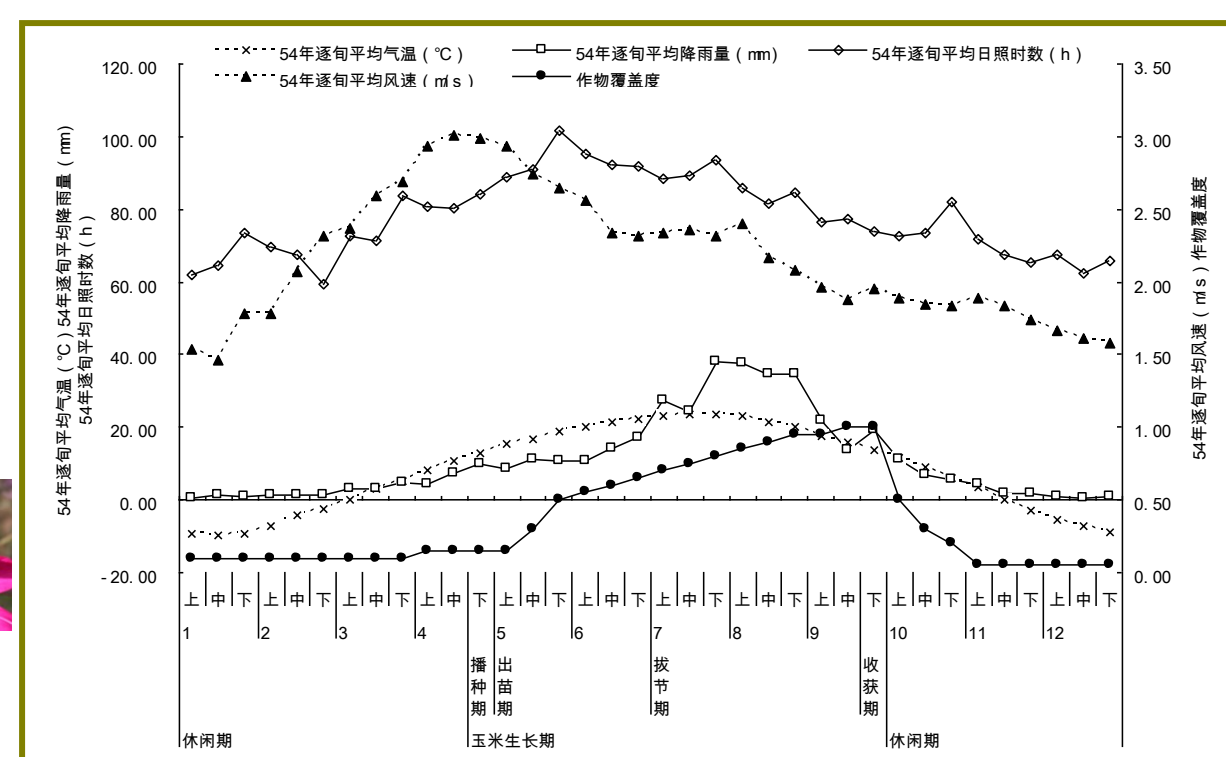
Scientists, local experts and managers, local farmers are involved in the monitoring.

The local farmers can protect the equipments and plots well in Miaowan Watershed.



中国科学院 水利部 水土保持研究所  
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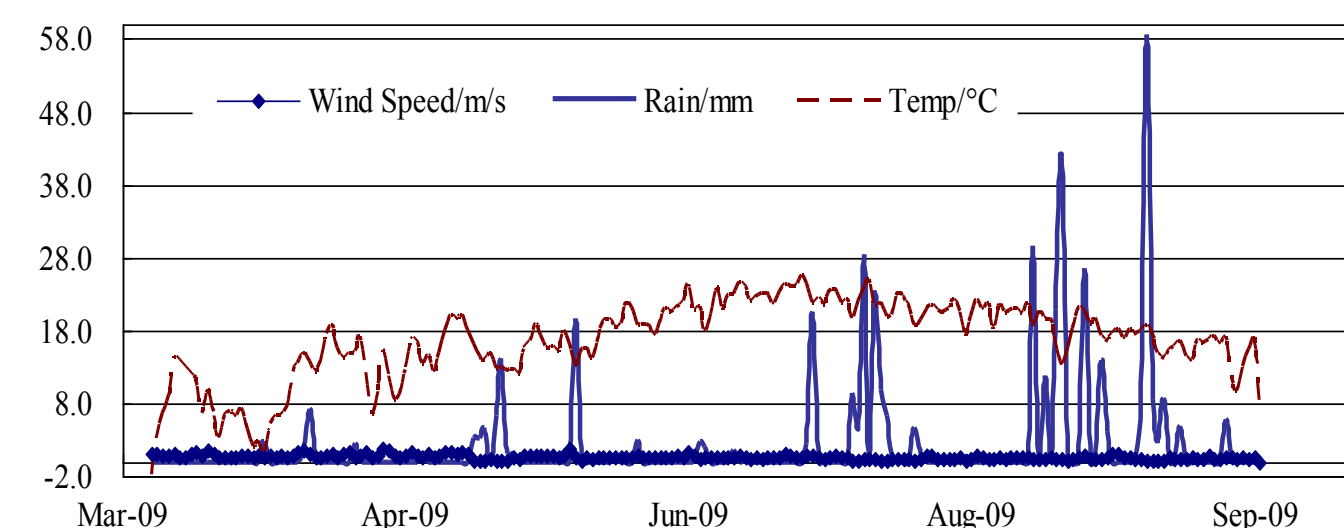
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*Yan River is a first class branch of Yellow River, China. The average channel slope is 3.26‰, and the area of whole basin is 7,687 km<sup>2</sup>. The landform is broken seriously with a gully density amount to 2.1 to 4.6 km·km<sup>-2</sup>. Annual average sediment delivery: 43.6 M tons; annual runoff: 142.5 M m<sup>3</sup>.*

### Monitoring 1: Climate and Weather Condition

Two set of automatic weather stations (HOBO) are set up in Miaowan, Zhenwudong Town, Ansai country and Kelaigou Village, Liulin Town, Baota County. The result of precipitation, temperature, wind speed would be used in the soil moisture change and soil erosion evaluation.



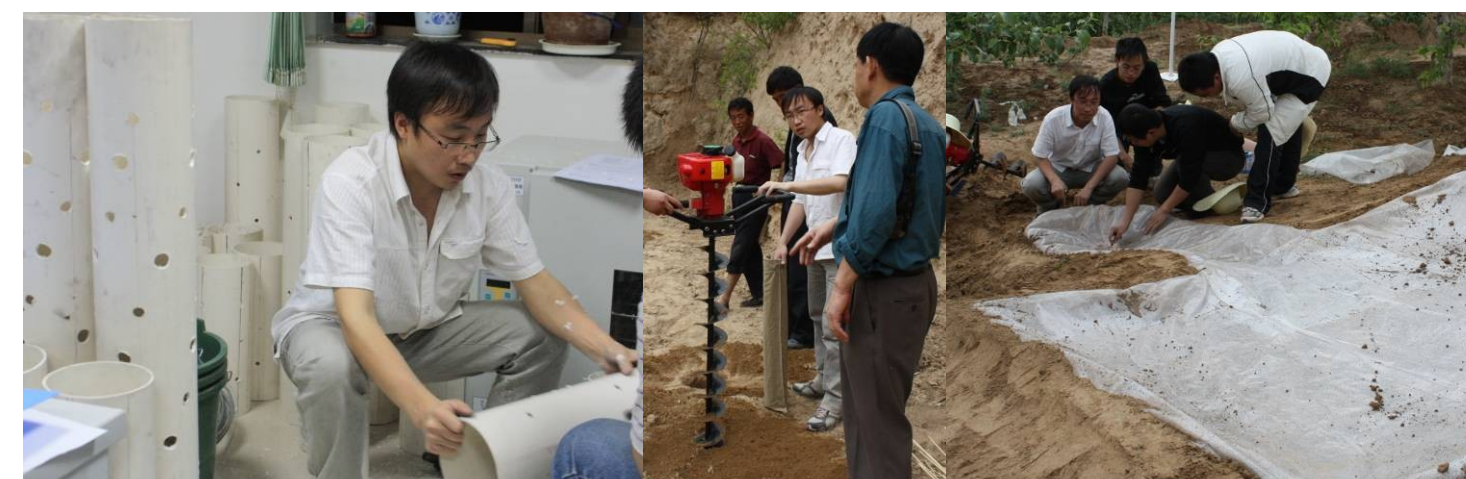
### Monitoring 2: New Soil Erosion Plots



Building erosion plots on the slope of orchard in Miaowan village (2 gradients ,13 and 29), 5 meters long, three treatments (natural slope without coverage, contour tillage and contour with mulching, two times) 。 Some soil erosion tests with simulating rainfall finished.

### Monitoring 3: Small Rainfall Harvesting

For improvement of dry and high climate change trends, small rainfall harvesting for deeper infiltration with plastic film in Miaowan Village are set and monitor the soil moisture and its impact on apple yield.

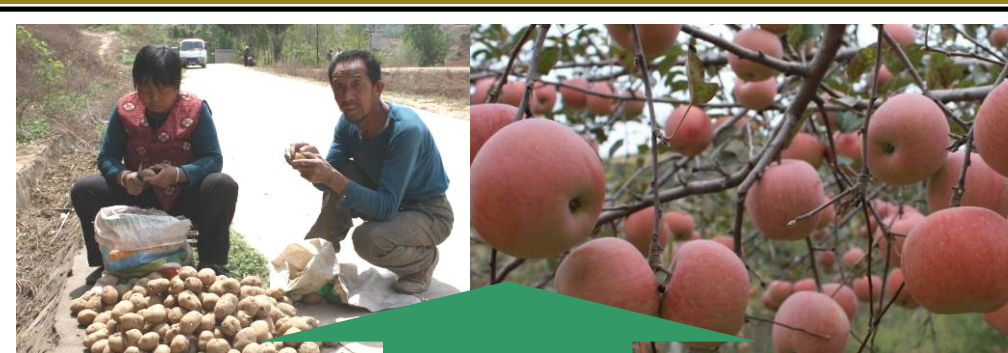


### Monitoring 4: Soil Moisture of Different Land Use



The cropland, orchards, grassland, shrub and forestry on different slopes or terraces are measured every two weeks with local farmers.

### Monitoring 5: Crop and Livelihood Monitoring



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