




Guangdong Agricultural Pollution Control Project

Practice on Fertilizer Reduction Based on New Type of Formula Fertilizer——A Case Study of Guangdong

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I. Staqus of Guangdong Agricultural Pollution Control



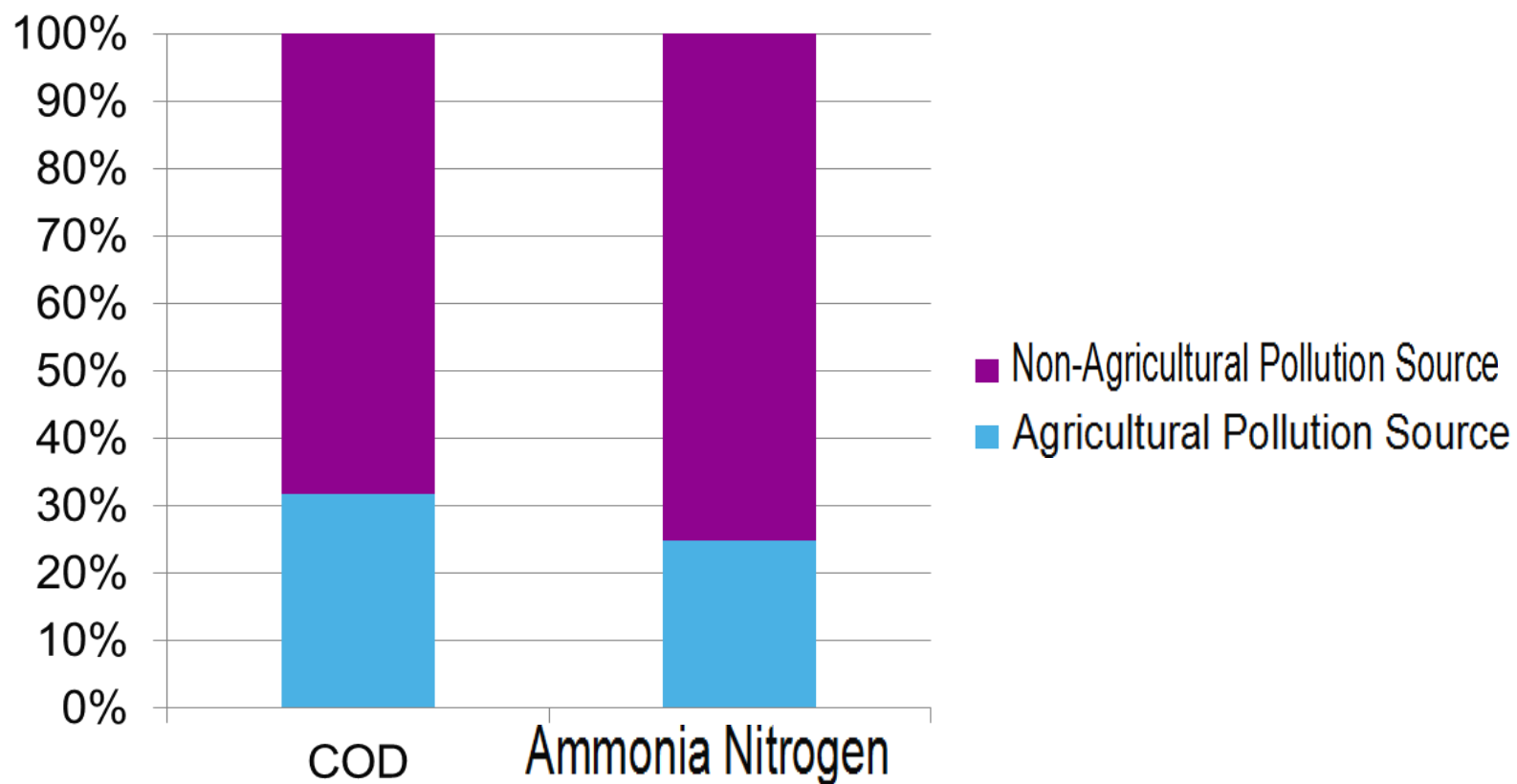


Agricultural pollution from agricultural wastes (such as unreasonable use of fertilizer, pesticide and agricultural films) has become a major source of water pollution and a key problem to restrict the agricultural and rural economic and social sustainable development of Guangdong Province.



**Agricultural
Pollution Source**
(According to the
First National
Pollution Source
Survey Report)

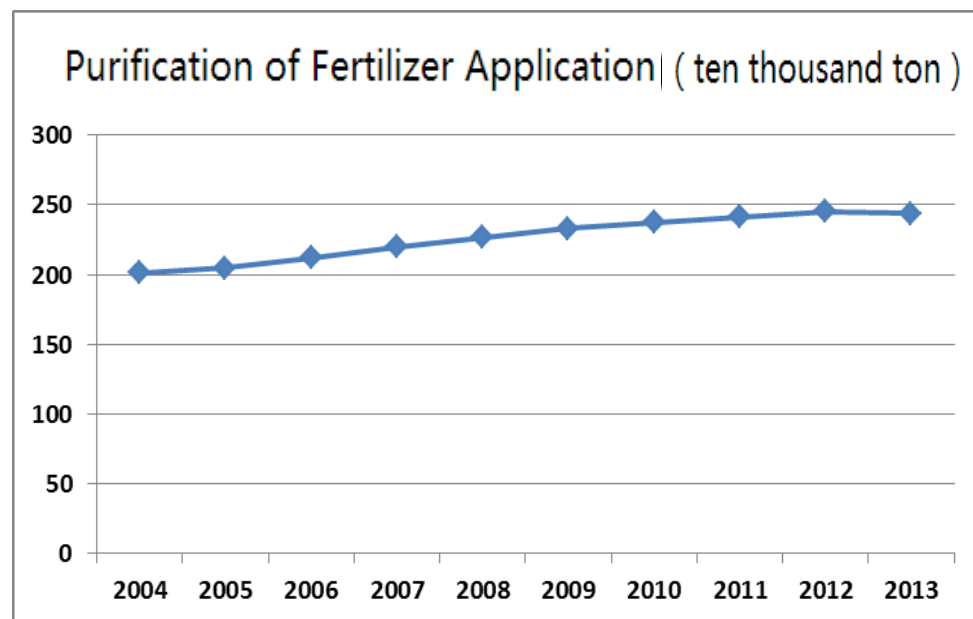
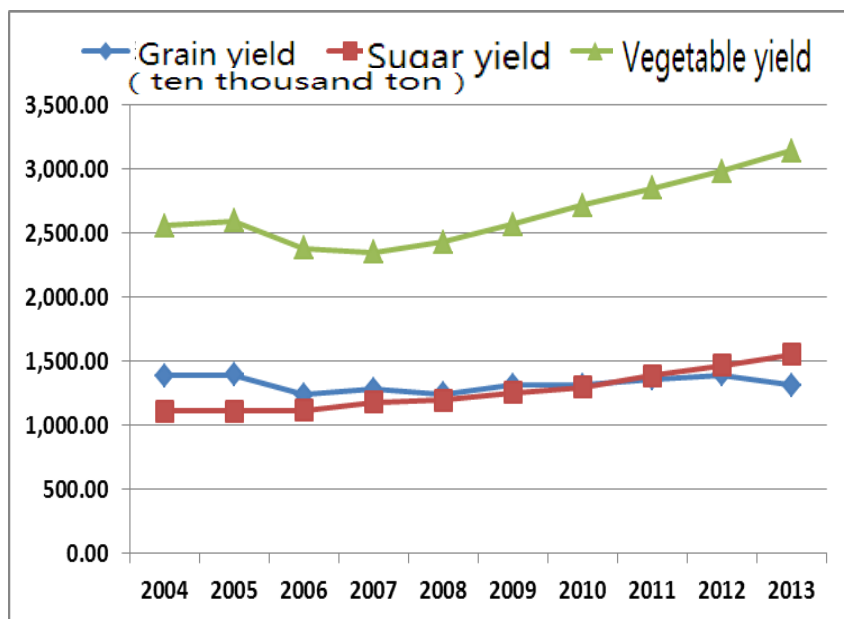
1. Livestock Wastes
2. Fertilizer Application
3. Pesticide
4. Crop straw
5. Household waste
6. Domestic wastewater
7. Agricultural wastewater



Proportion of Agricultural Pollution Source among the Emission of COD and Ammonia Nitrogen in Guangdong



Agricultural production depends on high inputs and high outputs, the use of fertilizer, pesticide and agricultural films has increased continuously

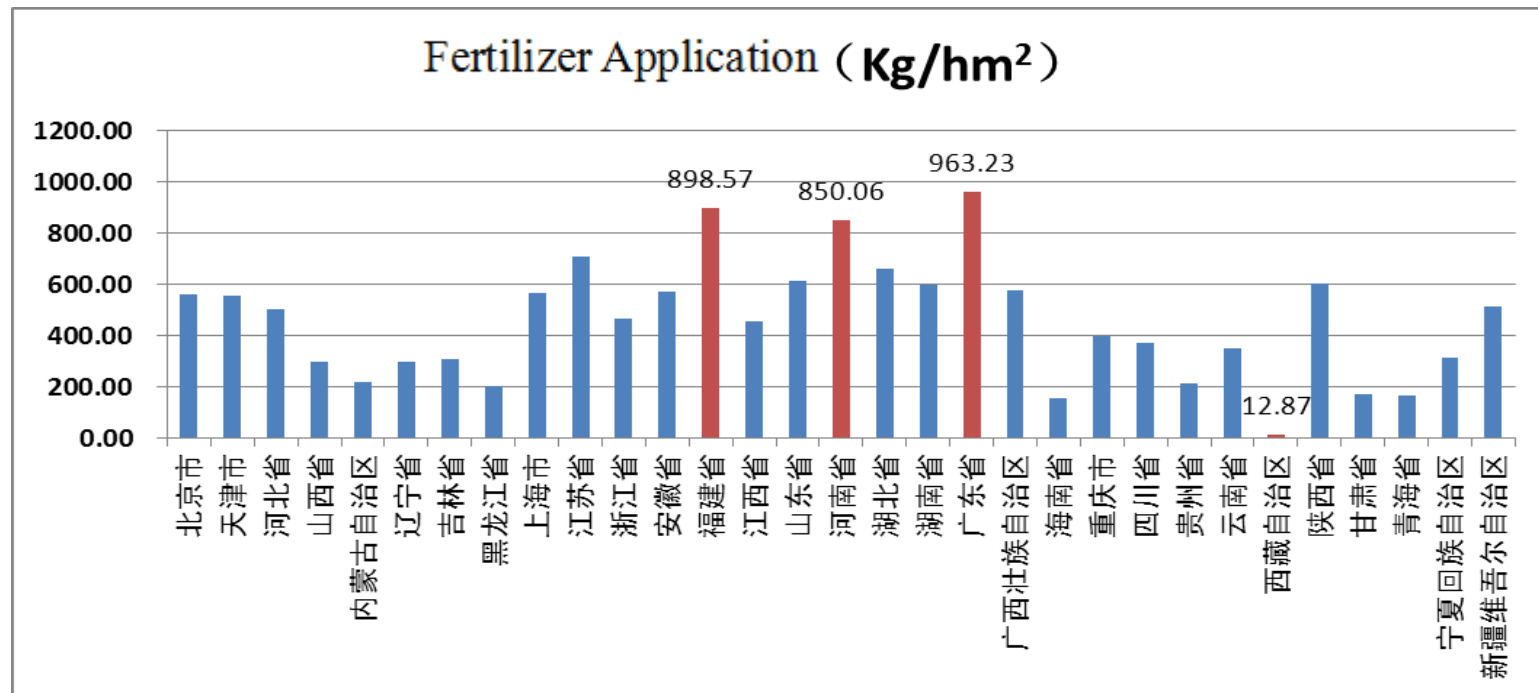


Changes of crop yield and use of agricultural inputs of Guangdong (**2004-2013**)

——National Bureau of Statistics



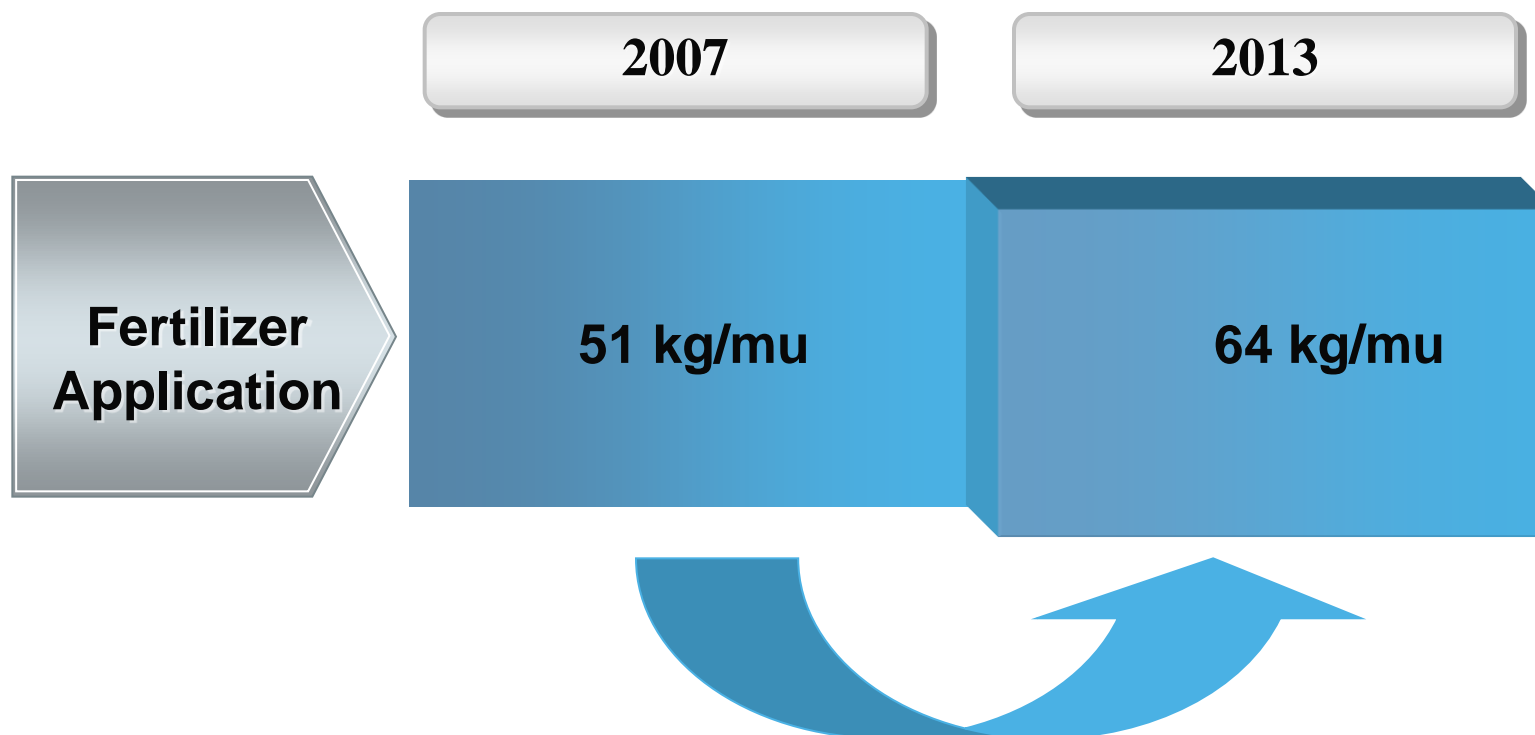
Largest fertilizer consumption, 963kg/hm²



National fertilizer consumption (unit area) of Y2013

——Fertilizer Application Date of Y2013 by
National Bureau of Statistics

—— Main Farmland Data of Second National
Land Survey of 2013



- With an increase of 25%, much higher than the international average(15 kg/mu)
- Nitrogen utilization rate is less than 30%



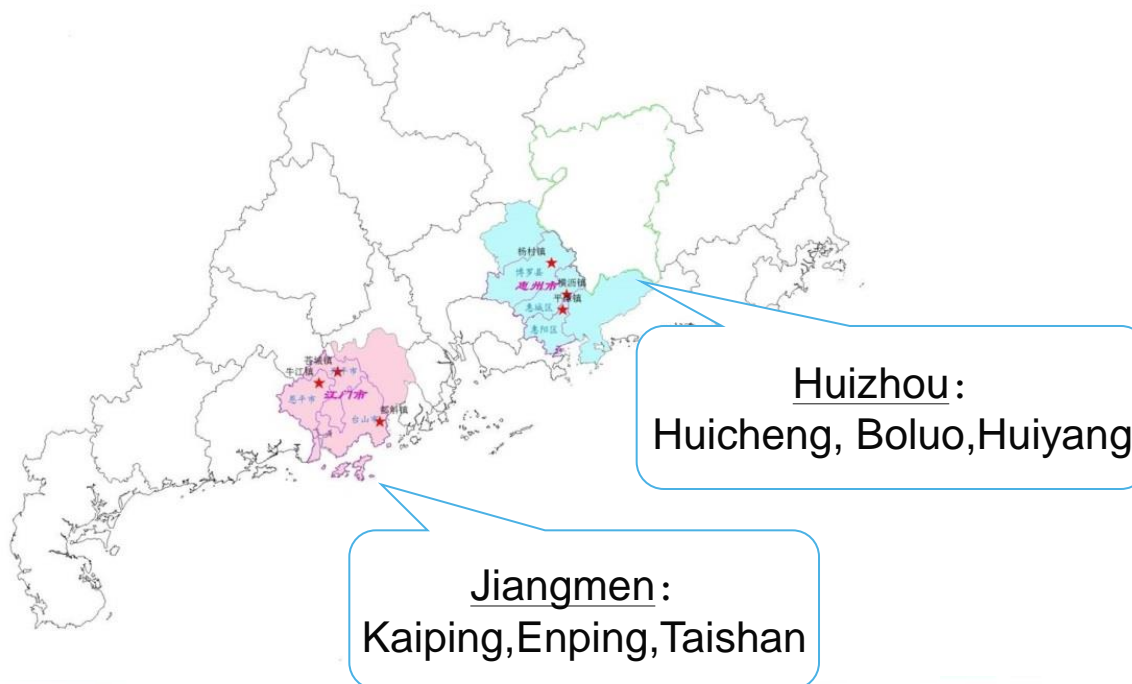
II.Practice on Fertilizer Reduction of Guangdong Province

❖ Implementation Scale



◆ Implementation status of Guangdong Agricultural Pollution Control (Y2014 and Y2015)

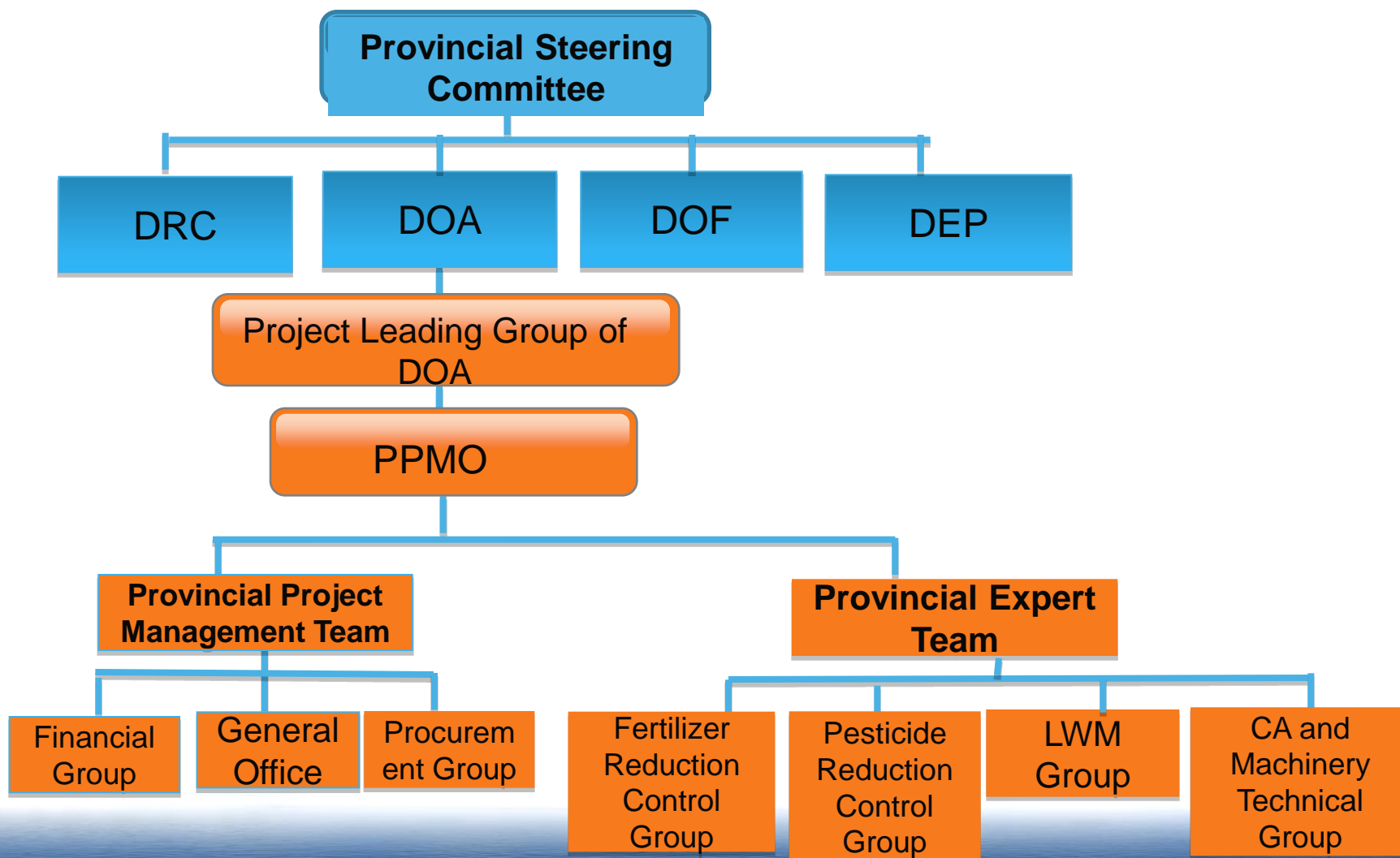
Year	Administration village	Cooperative	Farmers (household)	Planting enterprises	Farmland area(ten thousand mu)
2014	45	5	11830	10	7.2
2015	98	20	25469	13	16.3



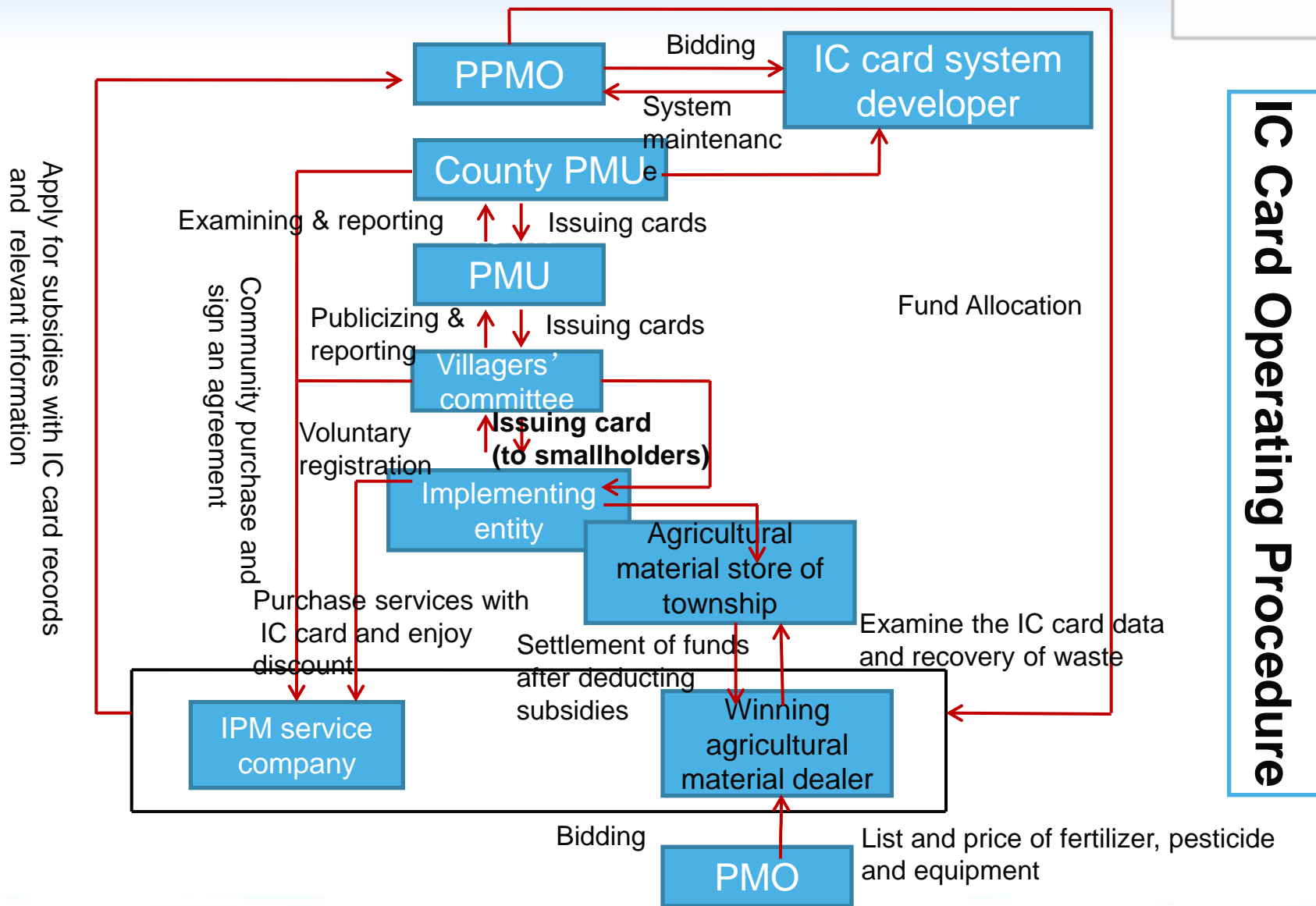


1

Establish Provincial Steering Committee



E3tablsh Compensation Mechanism -- IC Card System

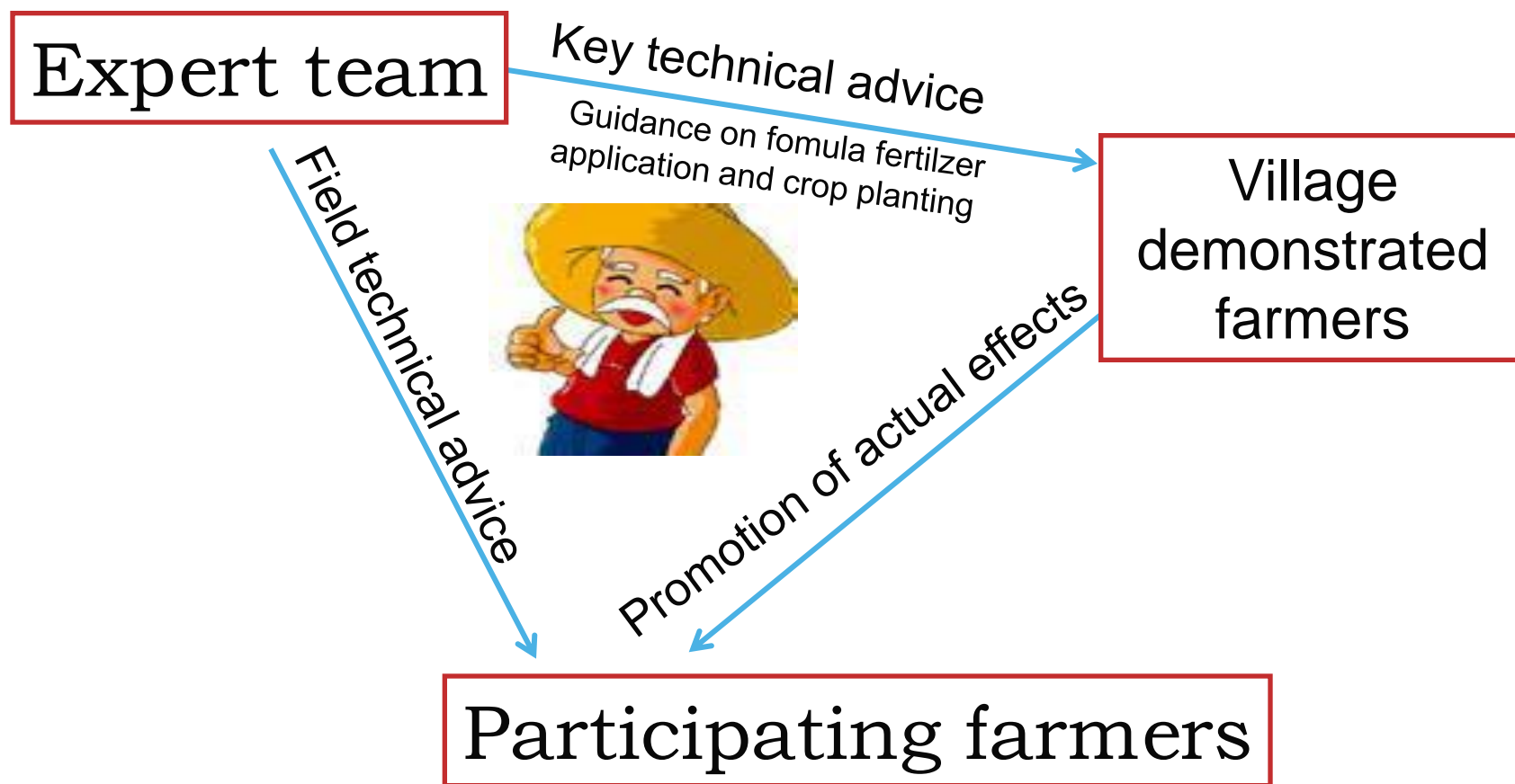




Targets	Incentive and subsidy	Agreements
Municipal PMU	Subsidy is allocated based on working performance evaluation	Incentive Agreement of Municipal-level PMU
County (District) PMU	Subsidy is allocated based on working performance evaluation	Incentive Agreement of County-level PMU
Township Technical Assistant	Levels of awards: Excellent: 2400 yuan; Good: 2000yuan; Qualified: 1600yuan; Poor: 0.	Environmentally Friendly Crop Production Demonstration Project Town-level Implementation Agreement
Village Technical Assistant	Levels of awards: Excellent: 1400 yuan; Good: 1200yuan; Qualified: 800yuan; Poor: 0.	Environmentally Friendly Crop Production Demonstration Project Village-level Implementation Agreement
Product Certification	(1) RMB5,000 : a pollution-free origin certification; (2) RMB10,000: a green food certification; (3) RMB20,000: an organic food certification.	Measures for Implementation of Subsidies for Agricultural Product Certification

4

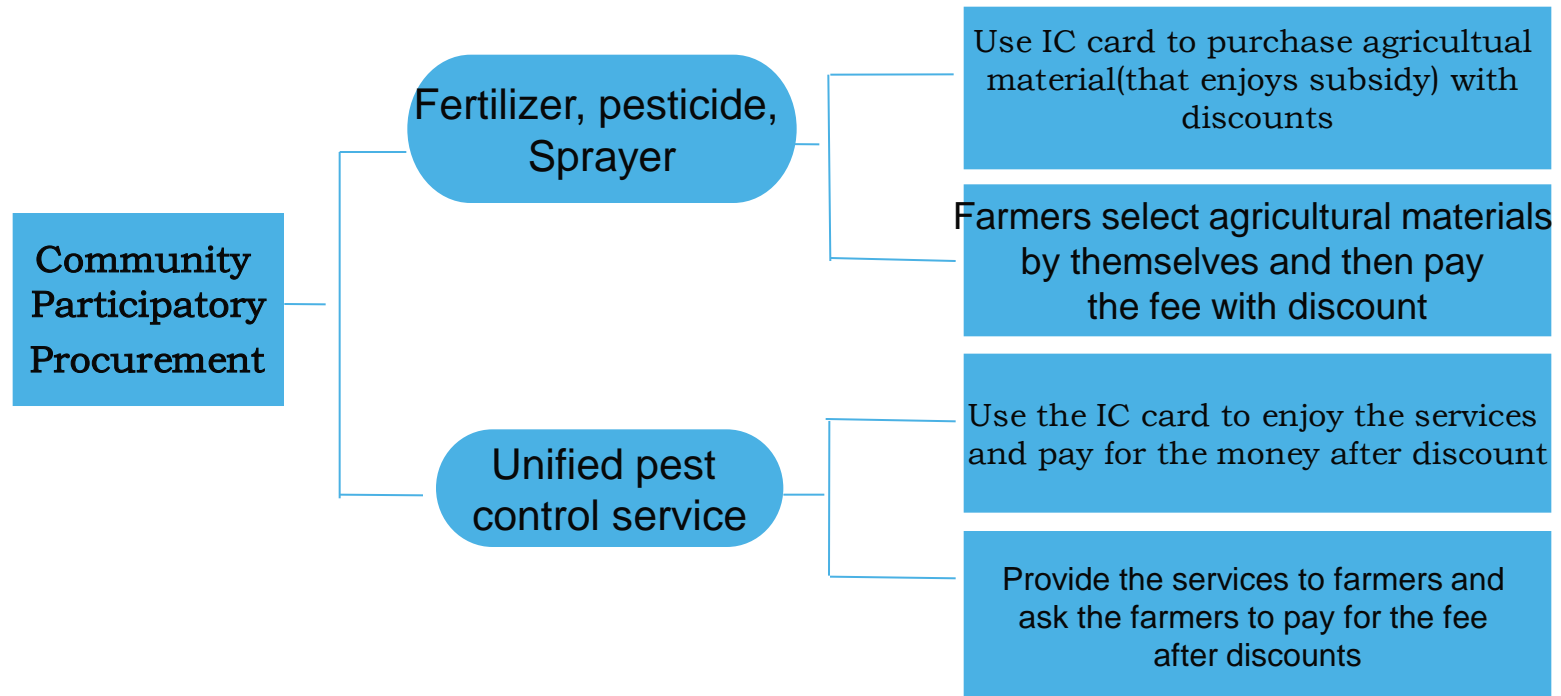
Innovate training methods



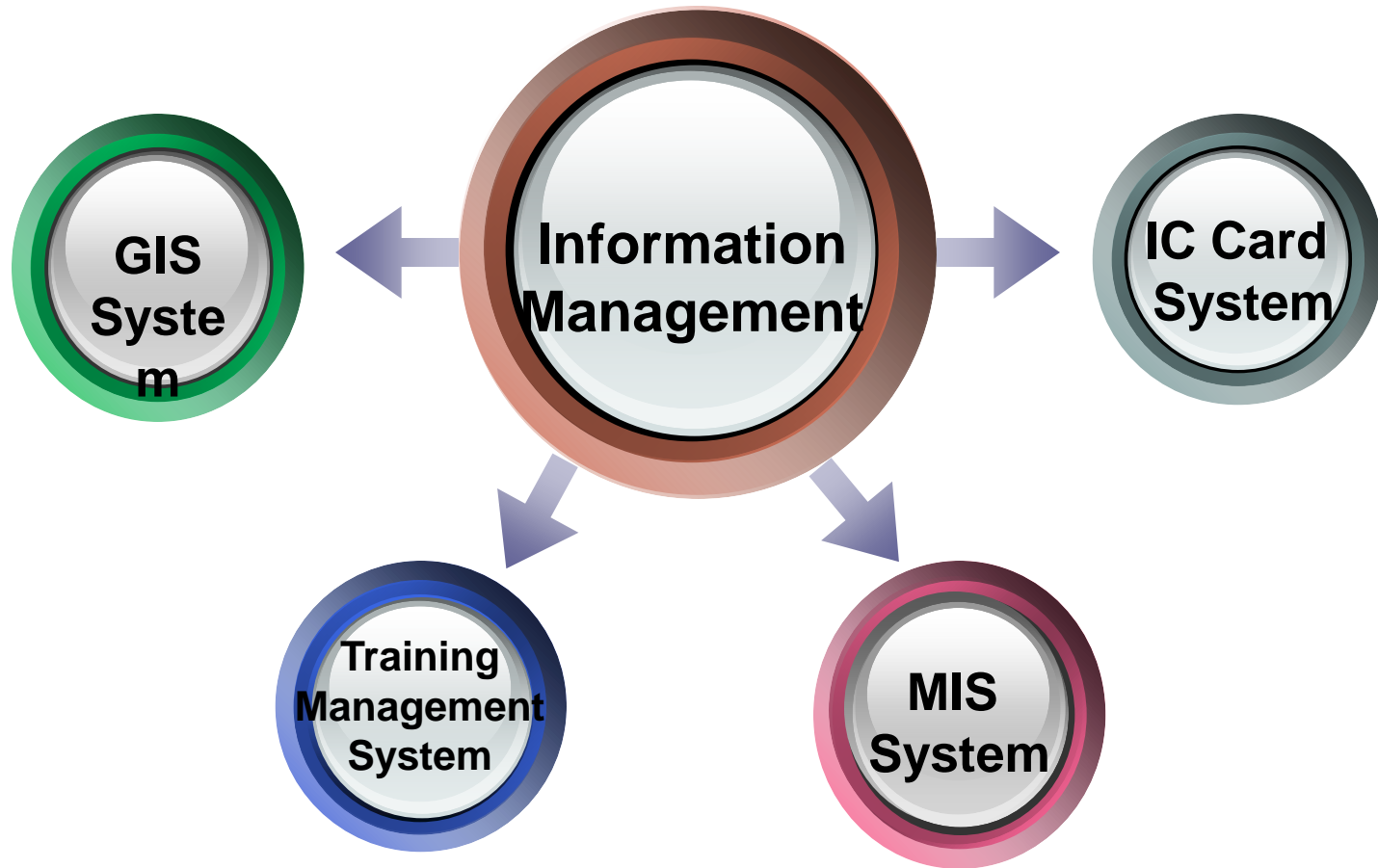
Less indoor course training, more site training



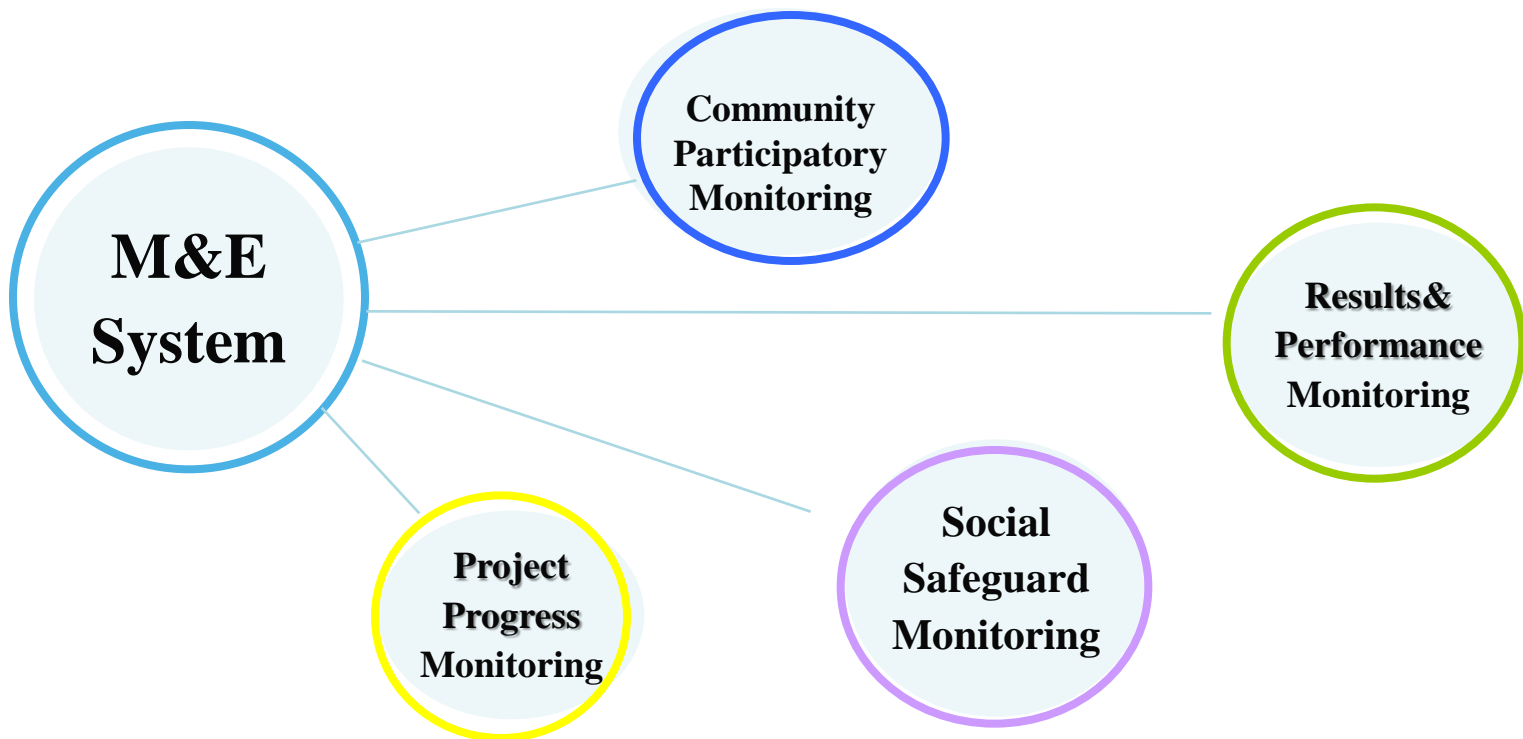
Establish Community Participatory Procurement Modality



Establish informatization management pattern



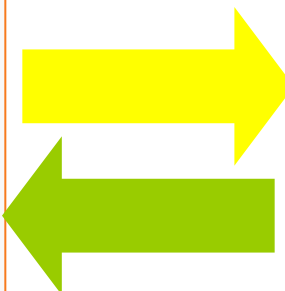
Establish Monitoring and Evaluation (M&E) System





Supervision

- 1 Use of project funds
- 2 Working performance of project towns and villages
- 3 Proper application of pesticide and fertilizer by farmers
- 4 Supplier supplies the agricultural materials on demand basis
- 5 Policy implementation of agricultural material supply stations



Assessment

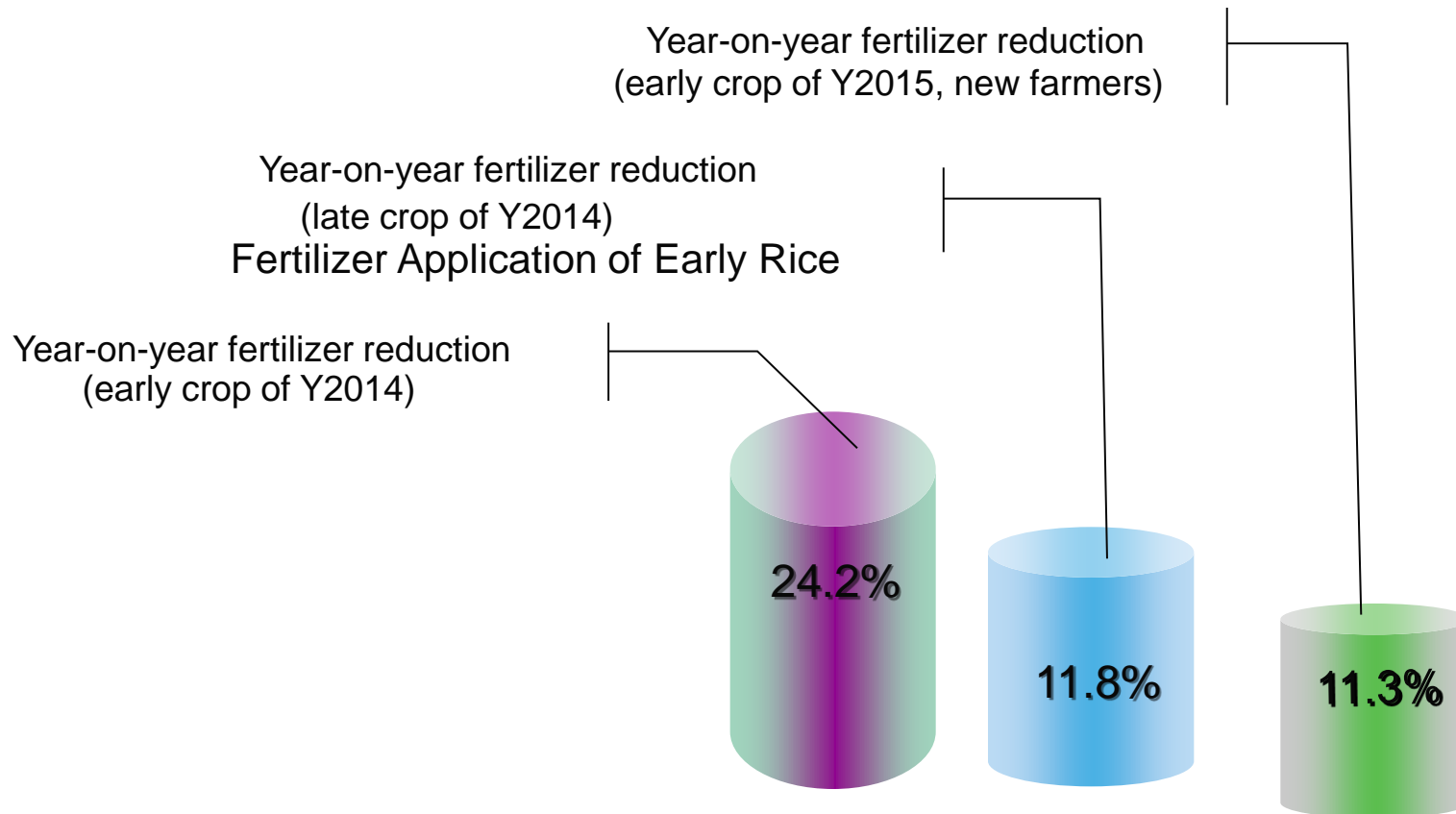
- 1 . Improve township/village evaluation method
- 2 . Strictly link the fertilizer/pesticide application methods and results with evaluation results
3. Interview & Report System
4. Hold an interview with head of agriculture bureau due to delay progress and poor implementation results. Annual evaluation results will be reported to governments at all levels



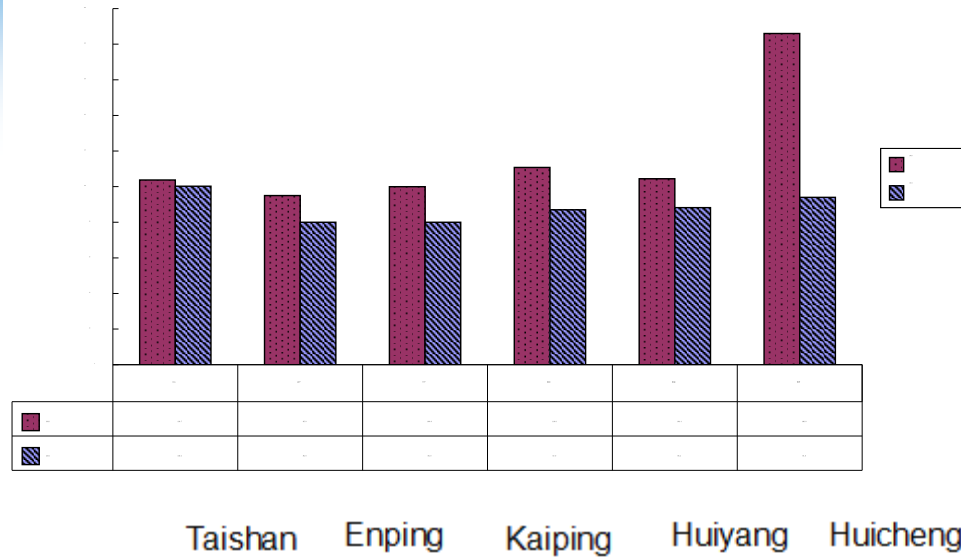
III.Initial Acheivements



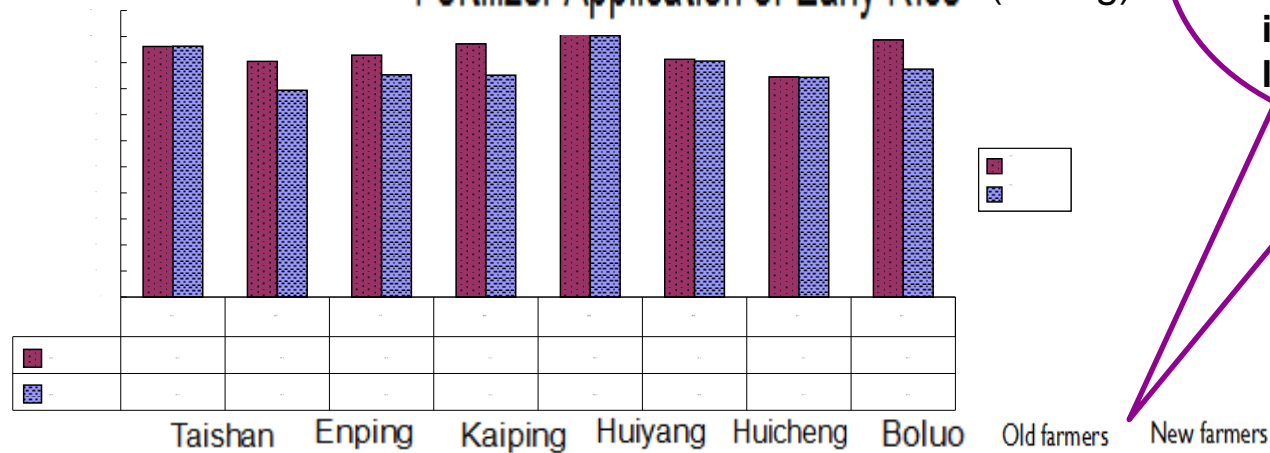
❖ General Reduction of Fertilizer Application



Fertilizer Application of Early Rice (1/2 kg)



Fertilizer Application of Early Rice (1/2 kg)

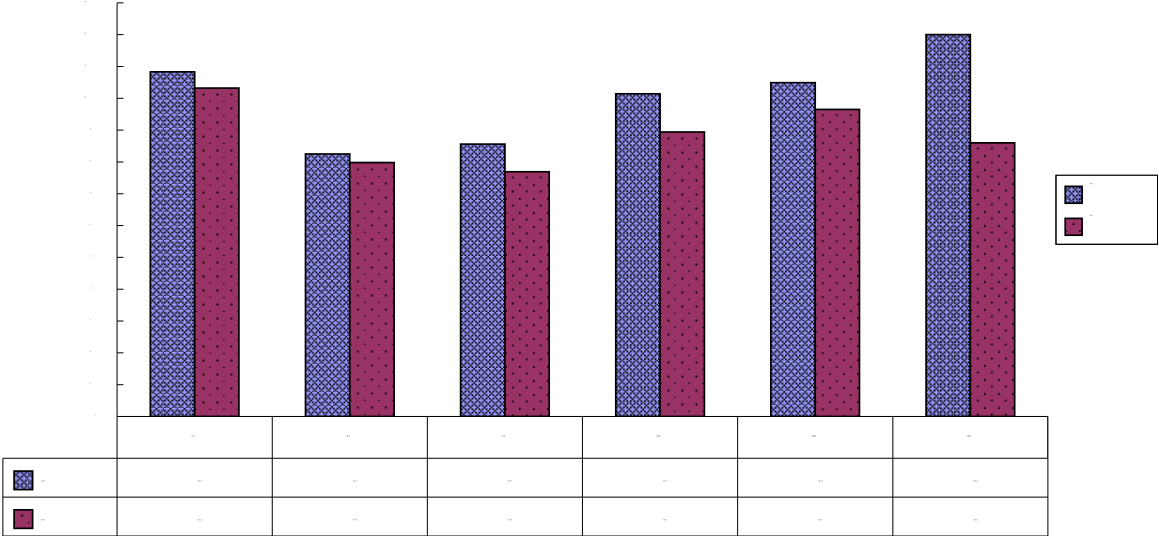


Old farmers: Joint in the project for over 1 year.
New farmers: Joint in the project for less than 1 year.

Old farmers New farmers



Fertilizer Application of Late Rice (1/2 kg)



Taishan

Enping

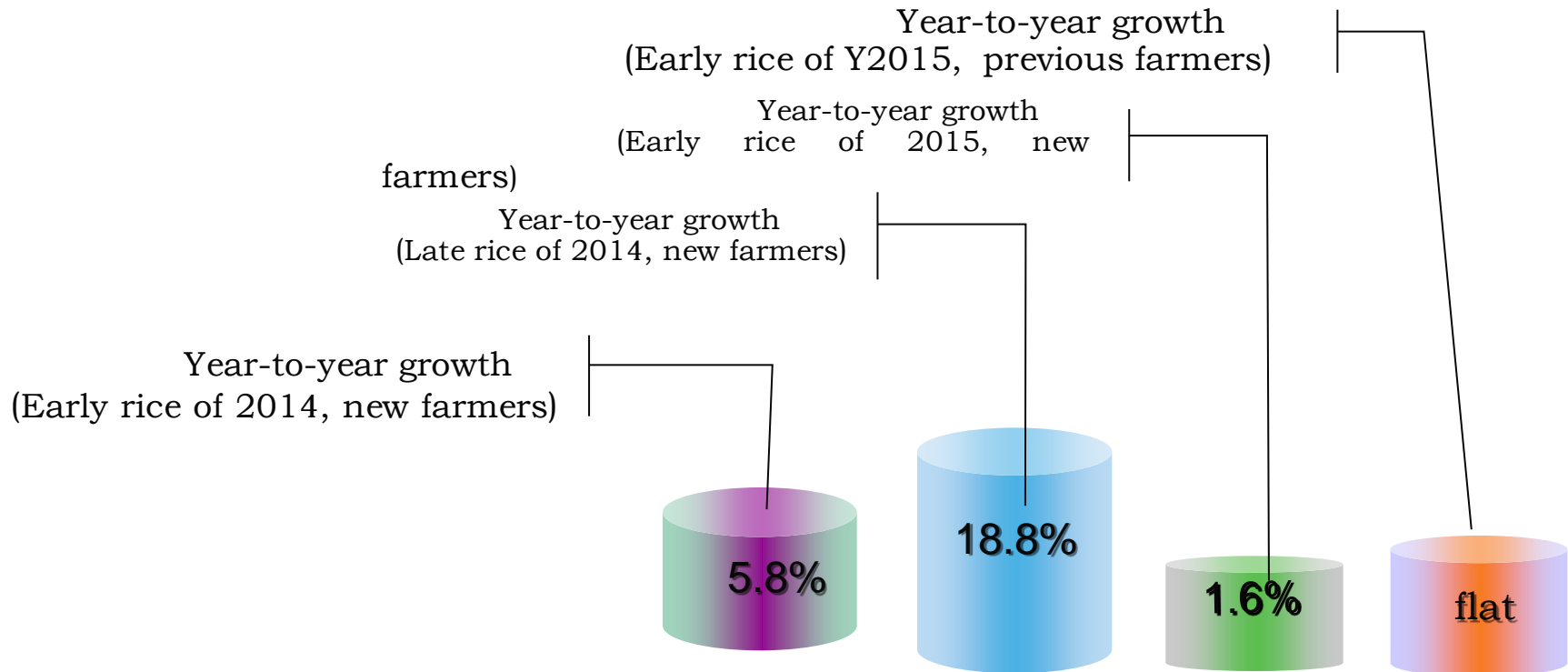
Kaiping

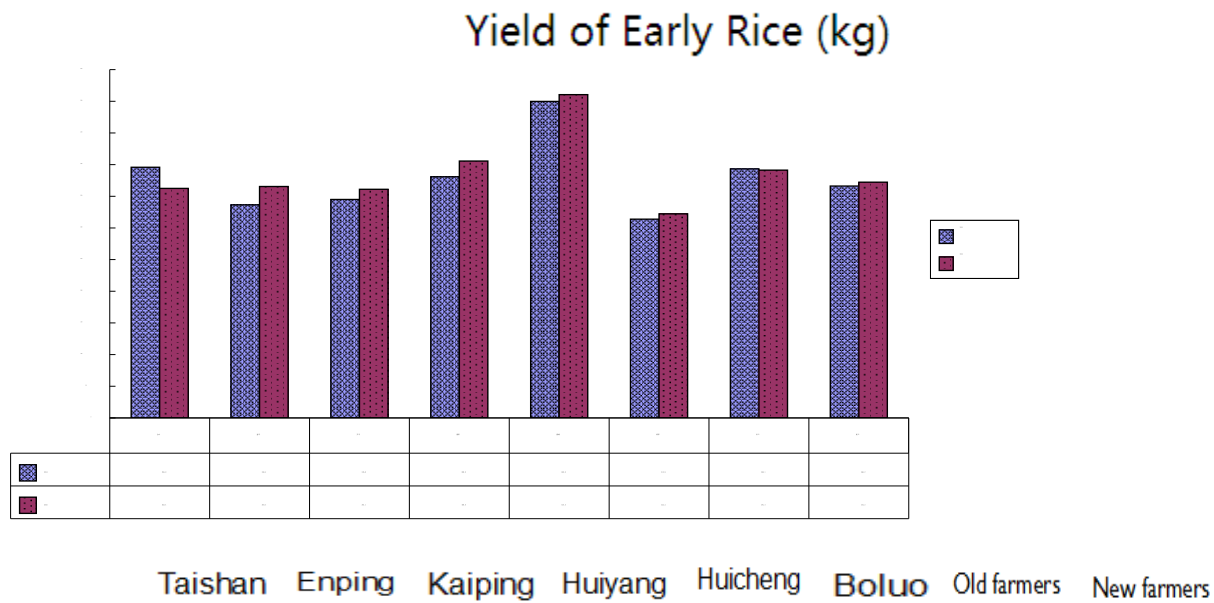
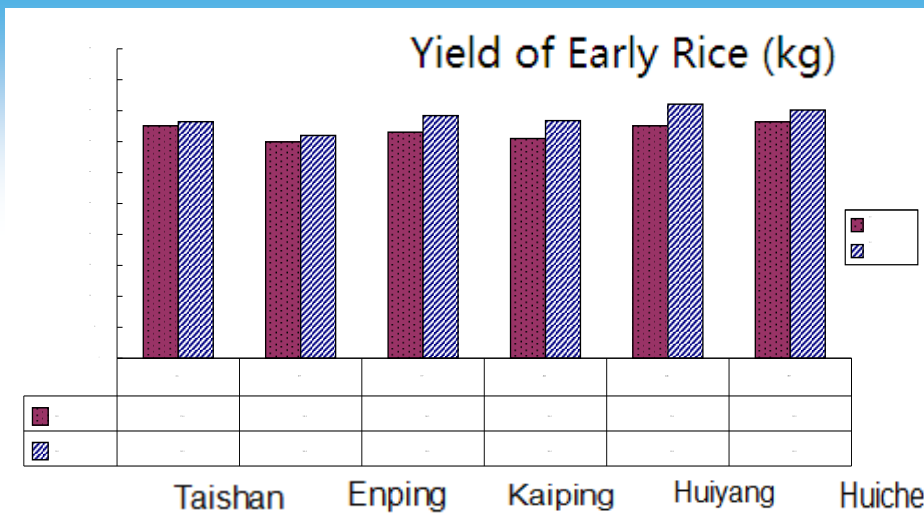
Huiyang

Huicheng

Boluo

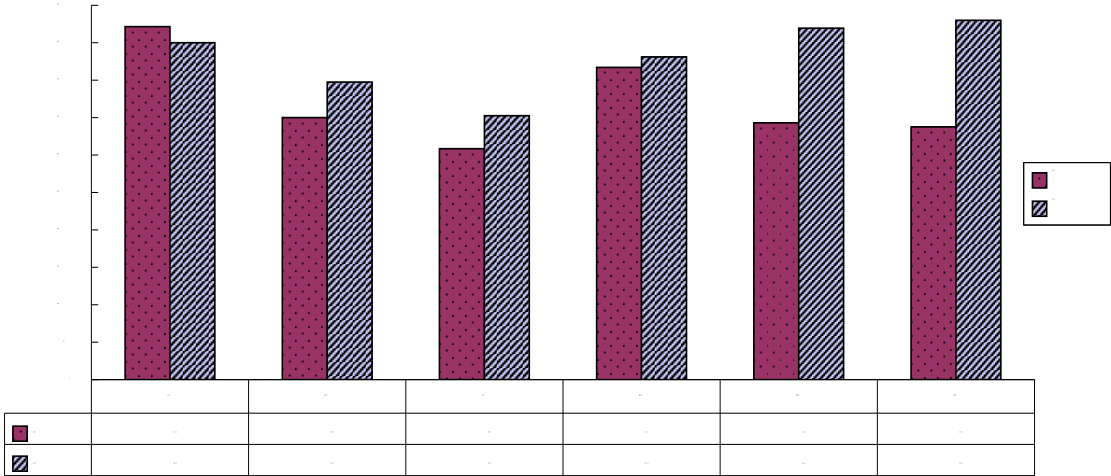
❖ Increase of Crop yield







Yield of Late Rice (kg)



Taishan

Enping

Kaiping

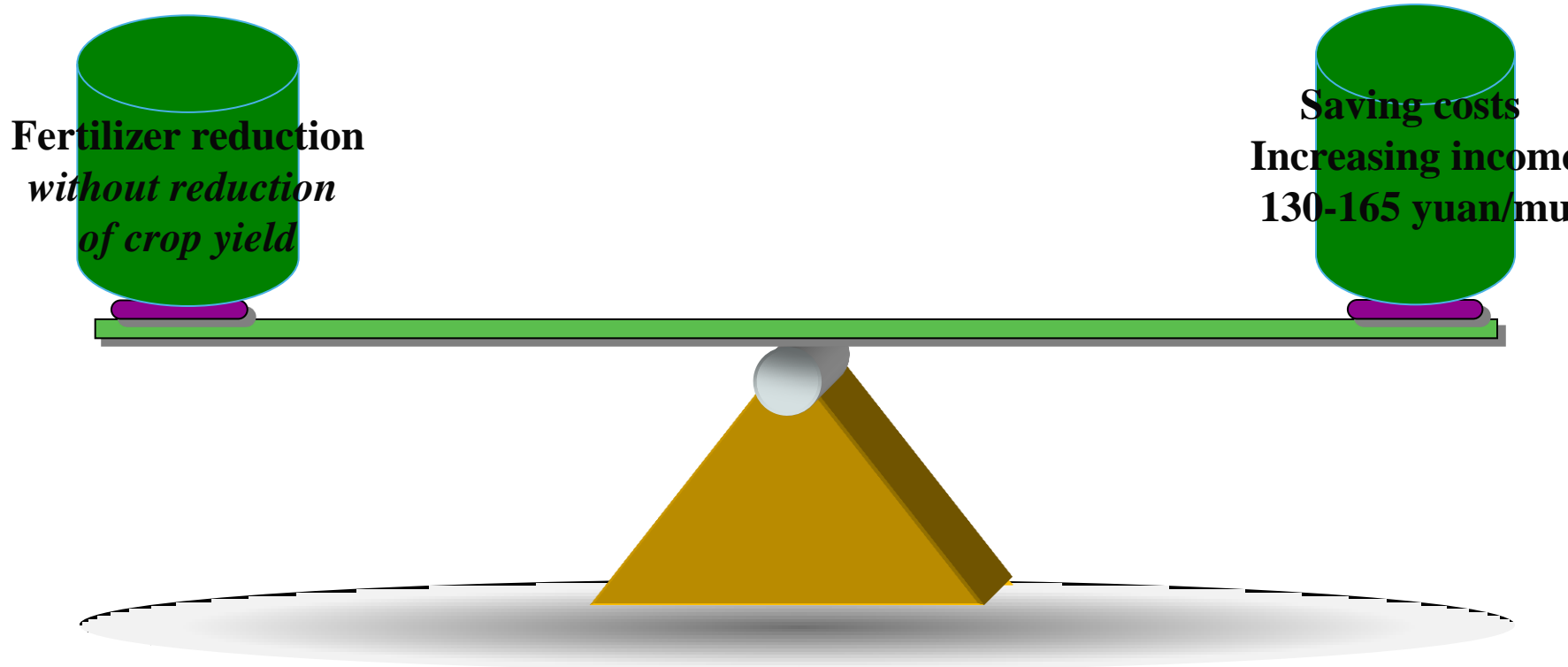
Huiyang

Huicheng

Boluo

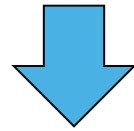


❖ Significant increase of farmers' incomes



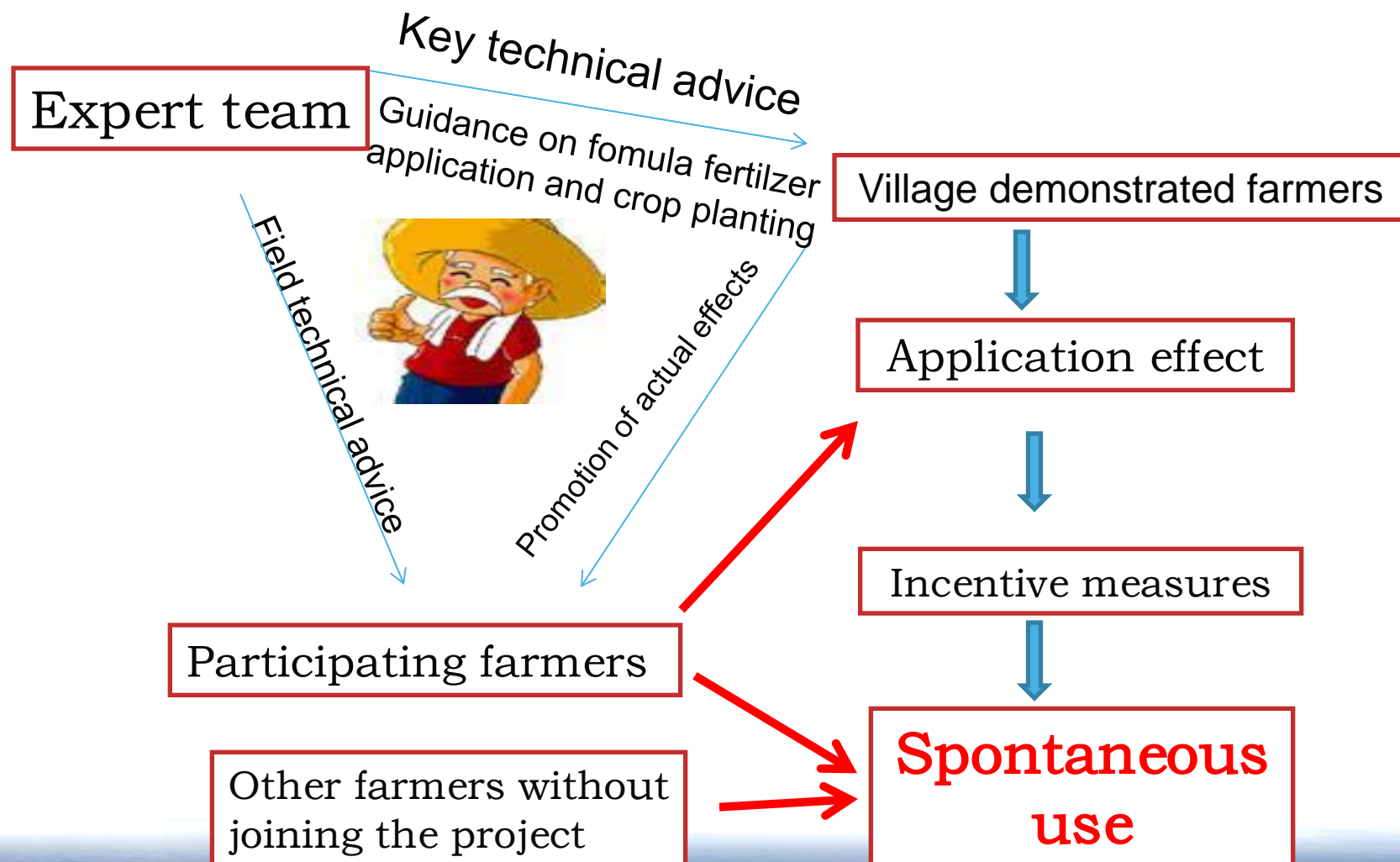


❖ Use of New Formula Fertilizers



Compulsory → Self-discipline

❖ Use of New Formula Fertilizers: Compulsory → Self-discipline

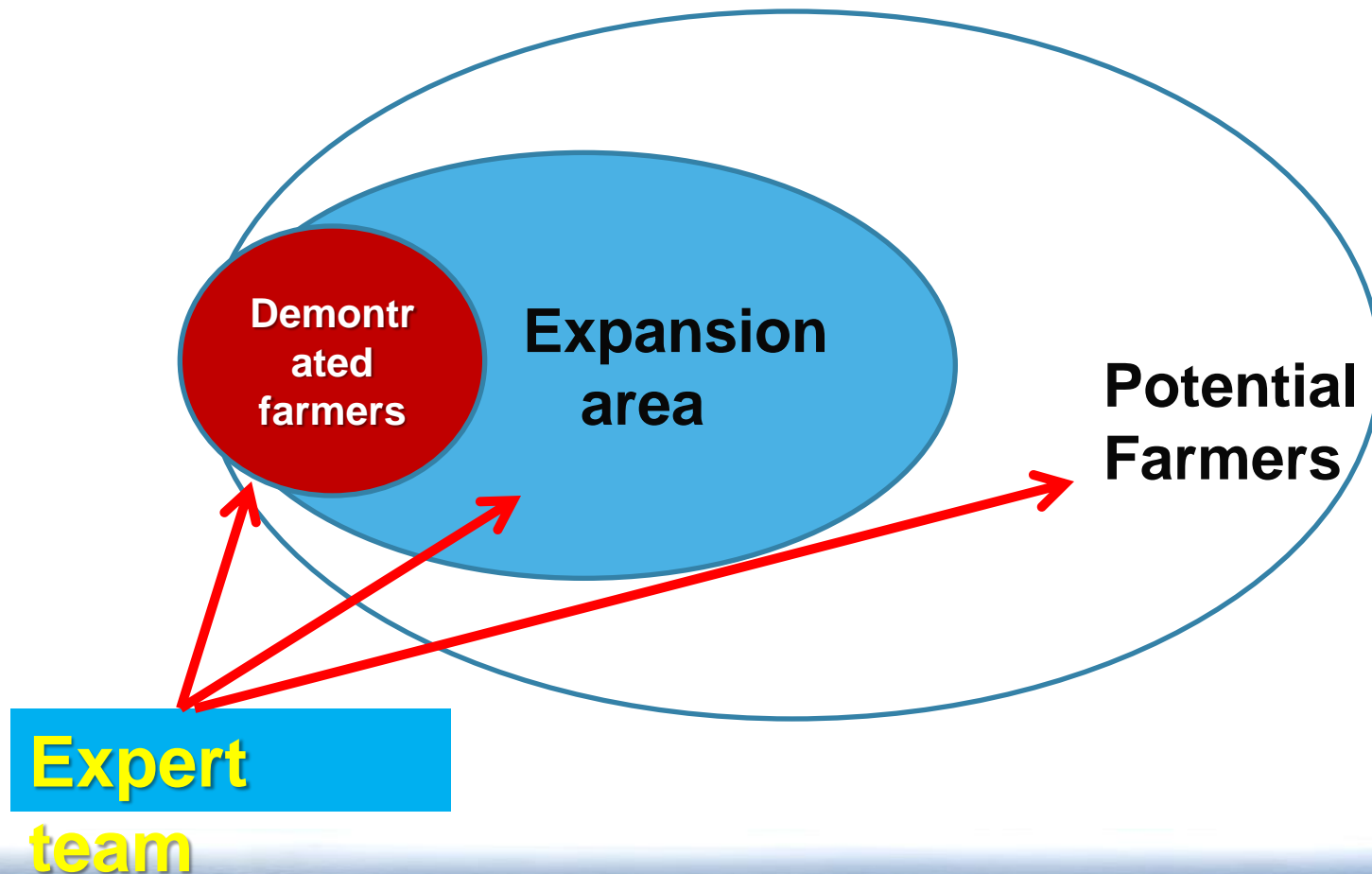




IV. Experience learned

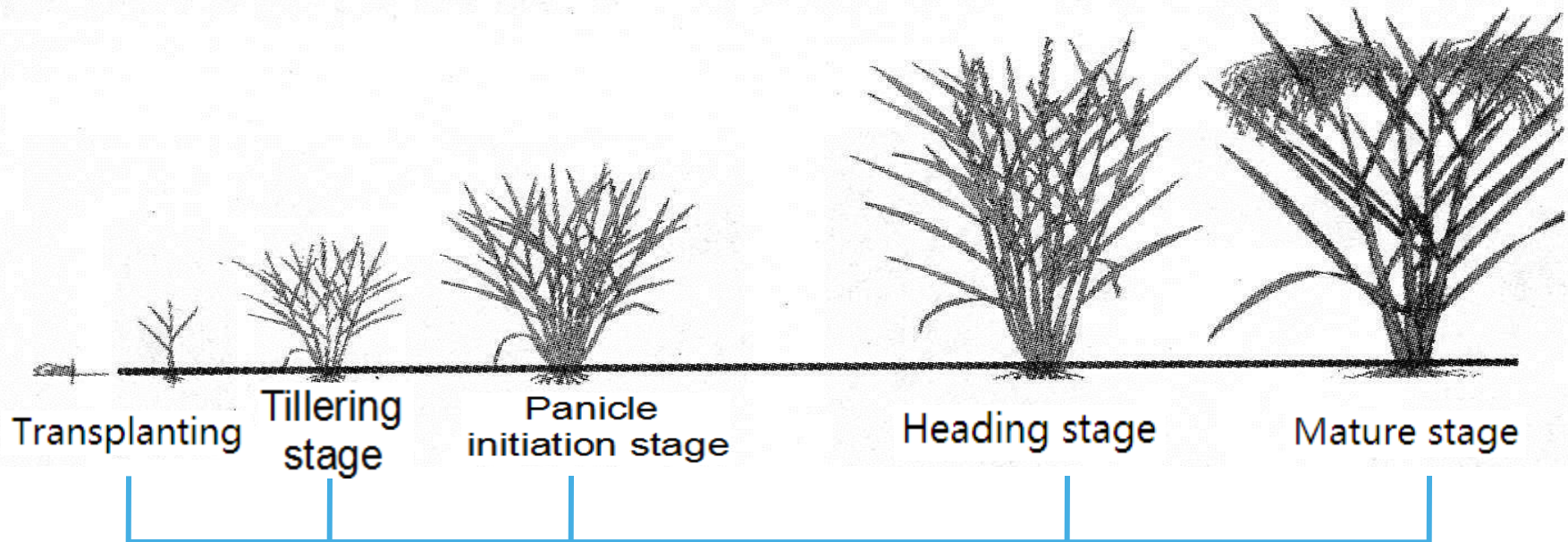


❖ Based on the new formula fertilizer, use the experience of one point to lead the whole project area





❖ Based on the new type of fertilizer, strive to solve the problems met through field guidance to gain the full trust of the farmers



Technical Guidance at All Stages



- ❖ **Combination of Compensation Mechanism and Incentive Mechanism**
- ❖ **Combination of Results Supervision and Performance Evaluation**
- ❖ **Introduction of Third-party Monitoring Mechanism**

*Thank
you!*

