

## Enhancing Farmers' Skills through Participatory Trainings at Farmer Field School: Case of Rong'an County, Guangxi Province, China



Dong Le Poverty Reduction and Innovation Officer, FAO China 27 June, 2019

#### Food and Agriculture Organization of the United Nations Farmers' Skills and Rural Poverty Reduction



## Enhancing farmers' skills Reducing rural poverty



### **Two Models to Train Farmers**

Standardized technology packages which seek to maximize commodity yields, delivered to farmers by experts Partnerships with farmers to co-produce innovation, creativity and flexibility in dealing with agro-ecosystems



#### Food and Agriculture Organization of the United Nations Participatory Training: Farmer Field School



- > A bottom-up participatory training model proposed by FAO;
- FFS builds on the principles of adult and non-formal education;
- FFS allows farmers and scientists to work together to coproduce vital knowledge and localized solutions to problems.





- In 1989, FAO developed the first FFS in Indonesia;
- Fast-forward 30 years, implemented in over 90 countries with 20 million farmers, pastoralists and fisherfolks trained;
- Adapted to various technical domains, including land and water management, crop-fish systems, disaster risk reduction, developing local enterprises and linking to value chains.

### Case Of Rong'an County, Guangxi



In 2013, the Plant Protection Station of Rong'an County Agricultural Bureau began to establish FFS in the region.

From May to October 2017, the station implemented the Integrated Pest Management (IPM) FFS under the China/FAO Pesticide Risk Reduction Program.



Guandai Village locates in Rong'an County. It is a typical impoverished village in mountainous areas. Because of the steep mountains, the transportation cost of agricultural products is relatively high. It is one of the 120 poorest villages within the county. Kumquat is a famous local orange.





### **Implementation Process**





#### **Governmental support:**

National goal of eradicating extreme poverty by 2020; MARA and Guangxi local government provided support.

### **Organizational support:**

Guandai Village established Farmers' Cooperatives.

Train professional tutors

Tutors develop training programmes with farmers Implement the trainings, with one session of 3-4 hours Training on marketing and sales of agricultural products





**Farmers significantly improved their capacity in multi-fields:** scientific farming; experiment and research; marketing and sales; participation and expression abilities.



The yield of kumquat increased greatly. The average yield per mu (15 mu equal to 1 hectare) increased by 500 kilograms. The large-size rate increased by 10%-50%. The direct economic benefits reached 15,400 RMB (2,260 USD) per mu, increased by 105.3% compared with the one before FFS.



**Reduced the use of pesticide, and eliminated the use of banned and restricted pesticides.** Farmers' pesticide use reduced by 40%, and the frequency reduced by five times. The sampling did not suggest excessive pesticide residues, and pesticide-poisoning incidents did not occur to trained farmers.



Mr. Chen Wenyi, a local farmer with a family of seven members, had an annual income of 15,000 RMB (2,200 USD) before the trainings. From May 2016 to December 2017, he joined the FFS, and applied the plantation skills in practice. In 2018, his annual income increased to 75,000 RMB (11,000 USD). The improved production skills helped lifting his family out of poverty.

Mr. Huang Haigang sold 57,500 kg of kumquat online in 2017, with total revenue of 2.3 million RMB (340,000 USD), which attracted the poor households to join the local cooperative.





### **Comparative Advantages**

Туре	Frequ ency	Cost	Interacti on	Compre hensive	Targeted Focus
Extension officers training farmers at village	Single/ Multi	Less	V	X	V
Farmers going to to to training	Single/ Multi	More	X	V	X
Farmer Field School	Multi	Moderate 1000 USD/village	V	V	V





Offering farmers with ownership and incentive, actively mobilized in economic development and poverty reduction



Tutors trained by FFS constantly training farmers and leading the development of new trainings

In **Guangxi**, the programme was initiated in Nov. 2007. From 2008-2018, 355 IPM FFS were implemented at 51 counties in 13 cities, training 11,187 farmers (34.7% female) in total.





#### FARMER FIELD SCHOOL GUIDANCE DOCUMENT Planning for quality programmes

#### SUSTAINABLE GOALS 1 NO POVERTY 2 ZERO HUNGER 3 GOOD HEALTH 4 QUALITY 5 GENDER EQUALITY 6 CLEAN WATER AND SANITATION Ň**ŧŧŧ**Ĭ -/w/` ١ AFFORDABLE ANI 8 DECENT WORK AND ECONOMIC GROWTH **9** INDUSTRY, INNOVATION AND INFRASTRUCTURE 10 REDUCED INEQUALITIES 11 SUSTAINABLE CITIES AND COMMUNITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION 15 LIFE ON LAND 16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS 14 LIFE BELOW WATER SUSTAINABLE DEVELOPMENT E. ×

Please refer to FAO FFS platform: <u>http://www.fao.org/farmer-</u> <u>field-schools/overview/zh/</u>

# **Thanks!**