



Tropentag, October 7-9, 2008, Hohenheim

“Competition for Resources in a Changing World:
New Drive for Rural Development”

What is the Role of Farmers Training on Cotton Production in Pakistan, China and India?

PIYATAT PANANURAK¹, SUWANNA PRANEETVATAKUL², HERMANN WAIBEL³

¹*Leibniz Universität Hannover, Economics and Management, Germany*

²*Kasetsart University, Department of Agricultural and Resource Economics, Thailand*

³*Leibniz-University of Hannover, Institute of Development and Agricultural Economics, Germany*

Abstract

This paper presents the results of a comparative analysis of the impact of farmer training in Farmer Field School (FFS) in cotton production three major cotton producing countries, namely China, India and Pakistan.

From 2000 to 2004, Food and Agricultural Organisation of United Nations (FAO) was supporting the Farmer Field School (FFS) project on the Integrated Pest Management (IPM) training farmers under “FAO-EU IPM Programme for Cotton in Asia”. The major purpose of the programme is detoxifying, existing pest control strategies, and replacing them with more sustainable, environmentally friendly cotton production technologies. In addition, the programme also develops, implements, and evaluates sustainable farmer education program.

This research uses panel data collected from trained and untrained cotton farmers in these three countries. Trained farmers under the concept of the FFS group have developed new skills, due to the intensive training. A “difference in difference” model was developed to measure the impact of training participation on farmer knowledge.

Other dependent variables were decision making capacity, pesticide use, yield, gross margin as well as environmental effects. Here the environmental impact quotient (EIQ) has been used as dependent variables in the model.

Results show that the FFS training in cotton can generate benefits for farmers under different socio-economic and policy conditions. It was found that generally the programme significantly reduces the growth rate in pesticide use. Furthermore it can be assumed that externalities are being reduced based on the results of the EIQ analysis. Country differences were found, e.g. the productivity effects are higher in countries with lower yields such as for example in Pakistan. The results suggest that investment in farmer education can be efficient if the target population is well chosen and quality can be assured.

Keywords: Cotton, farmer field school, impact assessment, IPM