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“Development on the margin”

## Determinants of Farm-household Income in Marginal Areas: The Case of Rain-fed Farms in Pakistan’s Punjab

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### Abstract

Agriculture is the backbone in Pakistan’s economy. In 2009–10 it contributed 21 % to GDP, employed 45 % of its labour force and provided essential raw material to agro based industry. Moreover agricultural food products accounted for nearly 17.2 % of the country’s export earnings. Agricultural growth has historically played a major role in Pakistan’s development and continues to be crucial for economic growth, poverty alleviation and development. The continuous increase in the population on the one hand and stagnancy in agricultural production on the other hand have resulted in a gap between requirements for agricultural products and supply. Natural resource degradation and cyclic drought attacks play an important role in the low productivity of farming, in particular on small farms in rain-fed areas. The gap between the potential yield of major crops on experimental fields of research institutes and actual yield at farmers’ field is wider in the rain-fed areas as compared to that in irrigated areas.

Against this background, the study which is presented explores the reasons for the low productivity of rain-fed agriculture in Pakistan, focusing on the determinants of the overall farm income in rural households. The field research was conducted in the rain-fed areas (Pothwar plateau) of Punjab province of Pakistan, in the districts of Rawalpindi and Chakwal. Primary data of 210 farm households were collected by personal interviewing, using a structured questionnaire.

The data were analysed by employing a log-log multiple regression production function through Ordinary Least Square (OLS) method to find out the determinants of the farm income. The results show that operational land holding and cropping intensity are inversely proportional to per hectare farm income. The area irrigated; the area under major crops and fodder crops; the number of livestock; cost incurred on livestock; hired labor; and tractor ownership show significant positive effects on farm income. Farm income of the household can be enhanced by employing improved production technologies through affective research and extension coordination.

**Keywords:** Household, income, marginal areas, Pakistan, Punjab