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A Case Study of the Training and Visit System in Haryana, India

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SUMMARY

The paper presents results from a study designed to estimate the effect on agricultural productivity of Training and Visit (T&V) Extension. As part of the field work for the study sample surveys of farmers were conducted in 1982 and 1983 in two contiguous areas in India. One of the areas is Karnal district in the State of Haryana where the T&V system was introduced in late 1979 and the other is Kairana tehsil in the State of Uttar Pradesh where the older community development system of extension still operates. The two areas are environmentally and culturally very similar except for the presence in Karnal of the more intensive T&V extension system and some differences in the incidence of production problems.

The farm level data show that in Karnal under the T&V system, and despite some organizational problems, the extent of farmer interaction with extension agents was greater than in Kairana and that farmers in Karnal viewed the change in the extension system favorably. Moreover, an examination of the rates of knowledge diffusion for a select set of practices for High Yielding Varieties (HYV) of rice and wheat suggests that T&V extension led, in the study area, to a noticeable increase in the rate of knowledge diffusion of several HYV wheat practices.

The main thrust of the paper, however, is an analysis of productivity differentials between the two areas for two crops, HYV wheat and rice and, the extent to which any estimated differences can be attributed to the introduction of the T&V extension system. Using the farm level survey data from the post-project period (1982/83) and econometric estimation procedures production and supply functions are fitted which explicitly incorporate, and hence control for, a number of variables which may cause productivity differences. The resulting estimates suggest that in 1982/83, after three years of T&V extension, HYV wheat yields in Karnal were about 9 percent higher than in Kairana. This estimate however is gross of any differential that existed before the more intensive T&V extension system was introduced. The results for HYV rice were not statistically significant. Accordingly, the remainder of the analysis focuses only on HYV wheat, for which the baseline differential is next estimated.

In the absence of comparable farm level survey data for the immediate pre-project period secondary data are utilized to estimate the productivity differential in HYV wheat yields between the two areas in the baseline year (1979/80). These secondary data, mainly mean yield levels, while available for a number of years are not compatible with the 1982/83 sample survey data in a number of important respects. In particular they do not distinguish between HYV and traditional varieties or between irrigated and unirrigated conditions. Hence a number of detailed