

FARMER KNOWLEDGE AND ADOPTION OF SUGARCANE FARMING PRACTICES  
IN RELATION TO FARMER LEVEL EXTENSION COMMUNICATION IN SRI LANKA

By

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## ABSTRACT

Low level of adoption of recommended farming practices has partly been responsible for low cane and sugar yield obtained by sugarcane farmers. The objective of this study was to investigate the effectiveness of extension communication at farmer level in relation to farmers' knowledge and adoption of farming practices in the Sri Lankan sugar industry.

Both primary and secondary data were used in the study. Primary data were collected from a stratified random sample of 157 farmers in Pelwatte and Sevanagala which included five groups viz.; rainfed and irrigated at Sevanagala and settlers, contract and non- contract outgrowers at Pelwatte. Data were also collected from a sample of 60 extension officers from both Sevanagala and Pelwatte Sugar industries. Data were analysed by employing non-parametric and parametric statistical methods such as correlations and regression using SPSS computer program.

Farmers were solely dependant on their Agricultural Assistant / Field Assistant (AA/FA) for the information and services. The main methods of extension communication namely AA/FA' s field visits and farmer's office visits had given more weightage to marketing and input coordination activities and less attention to farmer education. The majority of farmers, except non-contract group, attributed high credibility to the AA/FAs as well as higher ratings for AA/FA's role and input service.

The highest proportion of all the farmer groups, except the non-contract group whose knowledge and adoption level were comparatively low, had medium knowledge and adoption level and about half of the rainfed farmers was in the high knowledge and adoption category. The adoption level of the settlers, contract and non-contract farmers (PSI) was significantly lower than the rainfed and irrigated groups.

Farmer's knowledge was mainly determined by extension communication related factors and some personal factors such as farmers' experience, farm size and formal education. AA's overall performance as catalyst, educator, information seeker, resource linker and group promoter was important to increase farmers' knowledge than merely the frequency of extension contacts. But, within each settler group – irrigated, rainfed and settlers, knowledge was not significantly related directly to extension communication process.

Variables such as Farmers' technical knowledge, extension communication, input service, cane extent and social participation were significantly related to adoption of farming practices. However, farmers' technical knowledge accounts for 35% of the variation in the adoption while the knowledge and extension communication together account for 47% of the variation in the adoption. Rainfed and irrigated (SSI) farmers had higher adoption and yield levels compared to settlers(PSI) and outgrowers.

The use of individual extension contacts along with group methods to enhance the overall knowledge of farmers will help increase farmers' adoption of sugarcane farming practices.