

ADOPTION OF IMPROVED TOMATO AND BEAN VARIETIES AND CROP MANAGEMENT PRACTICES IN THE MATALE DISTRICT

M.S.D. MARASINGHE, B.M.K. PERERA, G.W.J. CHANDRASIRI¹

Department of Agricultural Extension, Faculty of Agriculture, University of Peradeniya, Peradeniya

¹*Horticultural Crop Research and Development Institute, Gannoruwa, Peradeniya.*

Vegetable production in the country needs to be improved to supply the required amount to fill the gap between the per capita requirement and the availability. Introducing improved varieties and improving crop management practices are the most practicable methods to increase the production as well as productivity of farming. Objectives of this study were to find out the level of adoption of improved crop varieties and crop management practices, constraints encountered by farmers and the effectiveness of the extension service and information flow in technology dissemination.

The study was done in the Matale district for tomato and bean varieties. Five Agrarian Service Center divisions were selected as the major tomato and bean growing areas in the Matale District. Both primary and secondary data were collected. Primary data was collected using a structured interview schedule. Multistage random sampling was done and the total sample size was 60. Informal discussions were held with Agricultural Instructors, seed traders and Research Officers. Percentages and frequencies were used to describe data. Correlation and chi square tests were performed to find out associations between variables.

The farmers' average yield of tomato and bean were 11.5 and 4.2 t/ha, respectively. Of the tomato growers, 63% had grown the variety T 245 with 17% adopting Thilina and imported varieties. About 75% of the farmers had grown imported but recommended bean varieties. The majority (33%) had grown the variety Top crop, followed by KWG and Sitti. About half of the population (55%) was aware of the characteristics of improved varieties. Their knowledge level of recommended seed rates, spacing, fertilizer levels and irrigation levels was poor. Considering tomato, more than 50% of the farmers had used high seed rates and less spacing compared to the DOA recommendations. The majority of farmers (57%) had used urea more than the recommended level. But usage of triple super phosphate and muriate of potash was low. Their usage of organic fertilizer was poor. The individual adoption of this technology was moderate. There was a significant relationship between the extent cultivated, duration of cultivation and the adoption. Their knowledge on pesticide recommendations was poor, while the knowledge on fungicide recommendations was good. Low soil fertility and lack of suitable lands are major constraints to vegetable production. Findings of the study indicated that lack of good quality seeds at the right time, high prices of seeds and fertilizers, incidence of pest and diseases are the major problems. The majority (48%) of farmers had obtained information from Agricultural Instructors.

Farmers' attitudes towards improved technology are moderate. Lack of good quality seeds at the right time, high prices of seeds and fertilizer, incidence of pest and diseases and high transport cost are the major problems faced by farmers. Vegetable growers should be given more knowledge on pest and disease control. Agricultural Research and Development Assistants should be trained in technology dissemination. Information dissemination from mass media should be improved for greater impact.