

RELATIONSHIP BETWEEN INPUT USE AND PRODUCTION OF SELECTED SUBSIDIARY FOOD CROPS IN SRI LANKA

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Subsidiary food crop (SFC) production should be profitable to retain existing farmers and to attract new. Profit depends on cost of production, output and output price. Therefore, analyzing a time series set of cost, gross income and profit data in subsidiary food crop production will shed light in making subsidiary food crop production a financially attractive venture. The objectives of the study were to identify variations in cost of production and production (gross income) in selected SFCs (Maize, Black gram, Cowpea, Red Onion, Big Onion and Chilli) within the period from 1998 to 2012, to evaluate the relationship between cost of production inputs and production of selected SFCs and to calculate factor shares and identify the influence of different factor costs on the total cost of production. Secondary data from the Department of Agriculture were used for this purpose. All prices were converted to real prices using annual average inflation rate. Factor share analysis and linear regression analysis were used to analyze data. Labour cost, machinery cost and input cost (material) are main cost components considered in this study. According to the factor share analysis, Maize, Black gram, Cowpea, Big Onion and Chilli are labour intensive crops. Red Onion is an input intensive crop. There is no any machinery intensive crop. The rate of increase in cost of production of Red Onion in *Maha* season is the highest while that of Cowpea (in *Yala*) is the lowest. According to the regression analysis, changes in labour cost, machinery cost and input cost ('x' variables) have influenced the gross income ('y' variable) in different proportions. The study findings convinced that, efficient use of inputs is the only way to reduce cost of production under these circumstances. In order to enhance resource use efficiency, an effective agricultural extension programme is a must.

Keywords: Gross-income, Regression, Subsidiary food crop