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Title : Understanding the decision making behaviour of Coffee

farmers of South India

## **ABSTRACT**

The above study was taken up in the Coffee growing regions, Kodagu, Hassan and Chickamagalur districts of Karnataka to understand the decision making behaviour of Coffee farmers during crisis period (2000-2004) and post crisis period (2004-2008). In the study area commercial varieties of Coffee i.e., Arabica and Robusta are cultivated along with other subsidiary crops like Black pepper, Cardamom, Ginger, Orange and Paddy.

Yield of Coffee (in Kgs) is taken as a dependent variable along with independent variables such as Age (in yrs), Experience in coffee farming (in yrs), Educational qualification, Average distance to research and extension centre (km), Average distance to market (km), Average distance to District Hq (km), Arabica area, Robusta area, Nutrient qty, Nutrient cost, Weeding cost, Bush management (in man days), shade management (in man days), Shade cost, Irrigation (in man days), Irrigation cost, Soil management (in man days), Harvesting (in man days) and Harvesting cost along with other strategies such as Diversification, Marketing and Development support including research and development. Statistical tests were applied to arrive at the conclusion.

The findings of the study revealed:

- no statistical significance is observed in decision making during the crisis period between the three regions amongst Arabica and Robusta growers. This implies that there is no difference in the yields of Coffee as most farmers sacrificed few of the cultural operations and compromised with input application, also there is a reduction in plant population of Arabica and switching over to Robusta.
- statistically significant difference in the decision making behaviour between Arabica and Robusta growing farmers is observed in the post crisis period, as in the case of Arabica in Hassan and Robusta in all the three regions.
- significant difference between the regions in the post crisis period in both Arabica and Robusta growing farmers is also observed.

The low yield of Coffee in the crisis period could be attributed to the impact of reduced prices combined with severe drought and menace of the pest - white stem borer on Arabica Coffee.

The study results revealed varied reduction in plant population in all the three regions.

- In Kodagu, Arabica Coffee farmer lost 2000 plants from crisis to post crisis, which is a loss of one and half acres of growing area. However, in the post crisis, 482 Robusta Coffee plants (an acre of area) were added.
- In Hassan, Arabica growing farmer lost 3834 plants from crisis to post crisis, which is a loss of three acres of growing area. Whereas Robusta growing farmers lost 472 Coffee plants, equivalent to loss one acre.
- In Chickamagalur, the Arabica growing farmer lost 1265 plants from crisis to post crisis, which is one acre of growing area. However, no change was noticed in case of Robusta plant population.

Multiple Regression analysis on the yield of Arabica Coffee indicated that the variables nutrient quantity, nutrient cost, distance to market and harvest man days positively contributed to yield whereas distance to research station contributed negatively.

- the prevalence of better prices for Coffee in the post crisis motivated Coffee farmers to apply recommended quantities of nutrients and adopt timely cultural operations along with stretching of the harvesting period, employing more number of labours.
- greater distance to research centre contributed negatively towards the yield as the farmers located nearer had better access to information and services like seed Coffee, parasitoids, picking mats etc.

The Multiple Regression analysis on the yield of Robusta Coffee indicated that the variables nutrient quantity, nutrient cost, soil man days, weed man days, bush man days contributed positively whereas harvest cost contributed negatively towards the yield.

- bush management had proved to be beneficial for Robusta Coffee in maintaining the potential of bearing wood.
- soil management in the farms also resulted in proper aeration to plants and effective utilization of nutrients applied.

The study also revealed that black pepper is grown along with Coffee as a major associated crop in all the three regions, as a source of additional income which increased positively from the crisis to the post crisis period. Maybe due to constraints of high investment, volatile prices and availability of suitable land, cultivation of - Anthurium, Vanilla, Ginger and Mulberry was not taken up by many farmers.

A detailed analysis of marketing strategies revealed varied decision making behaviour of Coffee growing farmers.

- In Kodagu and Hassan regions more than 80 % farmers sold their Coffee to agents who procure Coffee at farm gate which increased post crisis in Hassan.
- In Chickamagalur, during crisis period, about 46 % farmers sold their Coffee to agents and 22% to curing works whereas the remaining farmers to cooperatives or through other methods.
- The findings also revealed that Coffee farmers in all the three regions obtained price information from local traders, local news papers and Radio. There was marginal difference between crisis and post crisis.

The study on Government support strategies revealed that, the advisory services from Coffee Board was availed by 56%, 69% and 27% of farmers in Kodagu, Hassan and Chickamagalur regions respectively along with other services such as seed Coffee, picking mats and soil testing.

To sum up the study, there was an impact on the decision making behaviour of the Coffee growing farmers during crisis which affected Coffee production and profitability. Hence, in the crisis period there is a need for the government to support the farmers with suitable financial incentives.

Pepper, being the most associated crop supported the farmers with additional income during crisis, needs full patronage for technical know-how and financial incentives and in order to support farmers during price fluctuation. These may preferably be provided by the Coffee Board itself in the state of Karnataka.