

## Technology management for Indian farmers to enhance their profitability

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Accepted : June, 2010

### ABSTRACT

At present agricultural output remains with negligible growth due to various causes of man made and nature. Food shortages, under nutrition and poverty are increasing. Farmers with loss in their occupation, are migrating to other sectors. Even though the causes are known, an indepth study was made on technology management to identify the various causes and their effects on profitability in the farming. Using Cause and Effect diagram all the causes (about 80) were identified. The important six sub-systems namely, Monsoon / climate, Irrigation, Labour, Government policies, Marketing/Finance and Other problems consisting 24 groups of causes were selected. With suitable sampling plan and schedule, data from 100 farmers from Erode and nearby districts of Tamil Nadu were collected and analysed using statistical tools. Thirteen proposals were suggested to enhance profitability for farmers.

**Key words :** Technology management, Profitability, Cause and effect diagram.

Agriculture is a primary sector in India, contributing a share of 15% to 20% of gross domestic product as well as giving employment for about two-third population of India. It is a sector that consists stakeholders of farmers, farm labours, Agricultural departments of Government, Agricultural Universities, Scientific Research centres, producers of seeds, pesticides, fertilizers and agricultural implements, traders and consumers. This sector is very important since it has to provide food security for about 1150 million people of india. Food security consists of healthy food as well as with required nutrients. Unfortunately the above objectives are yet to be fulfilled since statistical evidence shows that still there are 200 to 300 million people in below poverty line being unable to meet their minimum food requirements and millions of children with nutrition deficiencies facing health problems. At present agriculture is facing several natural and man-made problems which are to be identified and analyzed for remedial action. As such in this study, using cause and effect diagram and field study by collecting primary data from farmers an attempt has been made in the above aspect to sort out the problems. Remedial actions are recommended for implementation by the concerned authorities.

The objective of the study : to identify root causes

affecting the profitability of farming, to measure the effect of important causes those affect profitability in farming by collecting data of the recent happenings with farmers using structured schedul and to suggest better ways to solve the problems faced by farmers.

### Reasons for study:

During the last 10 years, the production and productivity of majority of the crops faces ups and down with negligible growth due to various causes of man made and nature. Year after year, new type of problems are arising and become severe in the farming system in areas of labour, yield, price, price regulating mechanism of Government, debts, soil, water, fertilizers, pesticides, and weedicides. Majority of the farmers lost interest in farming due to less profit and mostly heavy loss in their occupation. Farmers and farm labours are migrating to other sectors. Food shortage, price of food items, ill health due to mal-nutrition and poverty are in rising stages. Hence, an indepth study on technology management in the farming was taken to identify all the causes existing in the farming and measure the effect on profitability of farmers. Primary data were collected with well designed schedule to get all the details of the problems and farmers suggestions to improve the system.

### METHODOLOGY

#### Cause and effect diagram:

The Japanese quality expert, Ishikawa had formulated a diagram which is helpful in identifying and analyzing the causes for a particular problem existing in an organization. This is known as Cause and Effect

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