ABSTRACT

Agriculture is the main occupation in most of the developing countries. More than 58% of population in India depends on agriculture directly or indirectly. Agricultural production is very important to meet the needs of the growing population. It depends directly on the fertility of the soil. Soil fertility is influenced by several factors. While some of the cultivation practices influence soil fertility positively, some factors like usage of more chemical fertilizers, intensive cultivation and the usage of pesticides etc., influence negatively. The soil fertility management practices of the farmers are influenced by the government policies, besides by other factors. Therefore it is important to understand the factors influencing the soil fertility management to evolve suitable policies for sustainable agriculture. An attempt is made in the present study to analyze the impact of agricultural policy on soil fertility management practices at macro and micro levels.

Several researchers have attempted to understand the agriculture policy at the macro level. The studies mainly focused on price analysis, impact of subsidies on resource use, marketing aspects etc. Some attempts have been made to link agricultural policy and Soil Fertility Management Practices (SFMP) in other countries. However very few such attempts are made in the Indian context. The present study tries to fill this gap by analyzing the impact of Indian agricultural policy on Soil Fertility Management Practices (SFMP) at the macro level and micro level.

The study is based on both secondary and primary data. Macro level analysis is based on the secondary data collected from various sources for the period 1974-2014. Based on the analysis of the secondary data it is observed that agricultural production, fertilizer consumption and fertilizer subsidy has increased significantly over a period of time. Higher agricultural output is attained only by increased use of chemical fertilizers. A significant correlation is observed between fertilizer price and consumption in India.

In order to identify the factors influencing the soil fertility management practices and analyze the impact of agricultural policy on soil fertility management practices, two districts from Karnataka were purposively selected. The study used multistage stratified random sampling. In the first stage two districts were purposively selected. While Mandya was selected to represent a wet district with assured
irrigation, Ramanagara was selected to represent rain fed agriculture. Three taluks from each district were randomly selected. Again from each taluk five villages were selected randomly. Altogether 15 villages have been selected from each district. The sample farmers were selected randomly in proportion to the population in each category of marginal, small, medium and large farmers in the district. Accordingly 344 farmers were selected comprising 173 from Mandya and 171 from Ramanagara district.

Apart from the calculation of compound annual growth rates, mean and coefficient of variation, Granger’s causality technique, Co integration technique and Regression model were used to analyze the time series and cross section data.

Review of the agricultural policy both at national and Karnataka level revealed that only in recent policies land was considered as a natural resource whose fertility can be managed with appropriate policy interventions and related programmes.

The study clearly brought out that Minimum Support Prices (MSP) does not influence the cropping pattern by creating incentives to farmers. The cropping decisions of the farmers in Mandya and Ramanagara districts are influenced more by tradition than by the government policy of announcing MSP. The regression analysis revealed that education level, size of land, prices of chemical and organic fertilizers, perceptions of the farmers about the usage of fertilizers in maintaining soil fertility influence the soil fertility management practices in the study area.