CHAPTER - VII

CONCLUSION

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The present work deals with the analysis of agricultural pattern in drought prone area, particularly in Khanapur tahsil of Sangli district. The major imphasis is given to assess the influence of drought prone conditions on cropping pattern, crop productivity, crop intensity, crop combination and over all agricultural productivity. It is also intended to find out whether farmers prefer any other subsidary occupation to cope with the low income from agriculture.

The Khanapur tahsil of Sangli district comes under rainshadow zone of the Western Ghats and comprises a part of Khanapur plateau. The Yerala and the Nandini river tributory, of river Krishna drain the entire region except the eastern hilly part which falls in Bhima basin. The study region receives about 632 mm of annual average rainfall which decreases from west to east considerably. The erratic rainfall is concentrated mainly in four months from June to September, and creates acquate shortage of water and dire need of irrigation both in kharif and rabi season. The soils in the region are coarse and infertile except the patches along the river banks where relatively fertile black soil prevails.

Now-a-days enly about 4.7% of the cultivated area has been irrigated in the study region. Out of this more than 78% is facilated by wells. It is seasonal source of irrigation as most of the wells have no water in summer season. The use of

traditional implements prevails through out the region. The tractors are observed in the study region but they are very less in numbers. The analysis of land holdings reveals that small size of holdings is pre-dominant where soils are fertile and water for irrigation is available. Due to this, the improved implements are less in use. So far marketing facilities are concerned, the ratio of villages to market is 8:1.

The influence of drought conditions on the cropping pattern prevails throughout the study region except the few patches of land where reliable source of irrigation is available. Jowqr (55.7%) and Bajara (15.9%), the most drought resistant crops are dominant in the region. They are followed by the crops like pulses (13.97%), groundnut (7.2%). The intensity of cropping is also influenced by the scarcity condition. The low intensity prevails in the central and north-eastern part of the study region. The cash crops are insignificant in proportion due to scarcity conditions, inadequate facilities of irrigation and presence of poor soils. As a result majority of the farmers have diverted their attention towards subsidary occupations like dairy and poultry. The milchstock is preferred by farmers for milking and drought force for agricultural practises. However, their distribution is uneven (Chapter IV).

The crop combination in the region has been also influenced by drought conditions as such the drought resistant varities are dominant in the crop combination. The less degree

of diversification is also a result of environmental conditions. The agricultural productivity has been also unevenly distributed. The weaker areas are observed at the central and north-eastern parts of the region, where the overall productivity is low. These are the areas where special attention is needed in future development plans. The micro level analysis attempted confirms the general observation noted in the study region.

In view of the above facts some strategies to minimise the influence of drought have been put forwards. The agriculture is main occupation and it needs to develop it to create base for improvement and growth of secondary and tertiary activities. It is necessary that the integrated plan of development for the study area be very carefully drawn up after a proper survey and a proper resource inventory of the region. Therefore, more importance be given on a rainfall period and use of rain water, soil survey and it conservation, afforestation, changes in agronomic practices, livestock development.

For the recharge of ground water to inhance the facilities of irrigation the construction of nala bunding, percolation tanks and dams like Baliraja and Strip dam, according to the micro watersheds in the study region are necessary. The judicious use of fertilizers for stabilizing and enhancing agricultural production is necessary. The water resources be owned and operated as far as possible on a cooperative basis or community basis.

Most of the farmers in the study region use the traditional seeds of crops. Inspite of that, its is necessary to use improved drought resistant varieties like Jowar CH5 - 5 and 9, Bajara - HB3 or HB1, Groundnut - SB-11, Karad-4 and 11, GL-24 etc. Non traditional crops like sunflower, caster, green gram and certain millets etc. have to be adopted and folder crops need be practiced. For this purpose, it will be necessary to invoke suitable legislative powers. Here it is necessary to tress the roll of forests. In several area of study region there has been indiscriminate selling of trees for fuel and this has adversely affected the soil erosion and agro-climatic conditions.

The strategy for the development of the region has to constructed in view of animal husbandary, poultry and dairy development. For the development of animal husbandary, pasture lands is a pre-requisite. Thus, a crop framing indicated above will sought to promote dairy and poultry development in the study region. Hence, it is necessary to take up a strong promotional and extension programs along with a infrastructure for supplying the required inputs for the development of animal and sheep husbandary, poultry and dairy development.

The inadequacies regarding the infrastructure like electricity, roads, agro-service centres, agricultural markets need be given a top priority. One would not claim that the suggested strategies are sufficient for the entire development

of agriculture, but it will be definetely useful to minimize the intensity of drought upto some extent and this will lead to stabilise farmers economic conditions.

