

CHAPTER-IV

SUMMARY AND FINDINGS

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## CHAPTER-IV

### SUMMARY AND FINDINGS

#### 4.1 Introduction :

This Chapter briefly sums-up the major aspects of the contents and the main conclusions of the previous Chapters.

#### 4.2 The Theme :

The title of the study is "A Study of Economics of Percolation Tanks, and their Impact on Agricultural Development of Kavathe-Mahankal Taluka". Naturally it was essential to begin with an account of location, topography, soil and rainfall of Kavathe-Mahankal Tahasil. The first Chapter throws light on these aspects. Kavathe-Mahankal is one of the 8 Tahasil of Sangli district. It comes under rain shadow area. The tahsil is characterised by scanty rainfall. The taluka is a part of basaltic plateau comprising sloping areas associated with rolling to undulating lands; with shallow, brown to redish brown soils. The area has a number of isolated longitudinal hillocks with prominent escarpments running from East to West. It means that this tahsil is badly in need of water-supply for agriculture as well as for drinking purposes both for human beings and livestock. Fortunately, however, natural conditions and geological formation of the tahsil are favourable for construction of percolation tanks. As there is absence of continuous flow of river, canal irrigation

is impossible in tahsil. In short percolation tanks is the only suitable source of irrigation in this tahsil.

#### 4.3 Growth of Percolation Tanks :

Second Chapter is devoted for an explanation of development of percolation tanks. Government of Maharashtra started the construction of percolation tanks as a famine relief measure, for which finances were made available by Government of Maharashtra. Accordingly construction of 110 percolation tanks was completed by the end of 1985.

In Chapter-II the economics of percolation tanks was studied with reference to attributes such as command area, cost of construction, number of wells under percolation tanks, man-days of employment generated. On the average it is seen that :

- A) i) Per percolation tank command area is  
18.74 hectares.
- ii) Per percolation tank number of wells  
is 14.05.
- iii) Per percolation tank cost of construction  
is Rs. 1,72,663.63.
- iv) Per percolation tank employment  
generated is 29,047.80 mandays.

B) Command area of percolation tanks is the dominant factor which determines the impact in respect of the remaining factors. In other words there is specific relationship between command area and estimated cost, number of wells under percolation tanks and employment. These relationships are stated below :

- a) Estimated cost of a percolation tank increases with increase in command area.
- b) The employment generated by the construction of percolation tank increases with increase in command area.
- c) The number of wells coming under a percolation tank tends to increase with the increase in command area.

#### 4.4 Impact of Percolation Tanks :

Third Chapter is the core of this study, because it examines the impact of percolation tanks on the economic conditions of beneficiary farmers living in the command area of the tank. This Chapter is divided in two parts. The first part of this Chapter is related to the discussion of methodology used in the conduct of the sample survey. The sample design adopted for the purpose of survey is explained in this part. All villages in the tahsil were classified in six groups based on number of percolation tanks in each village. One village was selected

from each group. However, in case of those groups having more than ten villages, two villages were selected.

To study the views of farmers about the impact of percolation tanks was one of the basic objects of this research. For this purpose a questionnaire was prepared. It was administered to fifty farmers from the village Kokale; which has maximum number of tanks. These farmers were selected by random sampling method. These farmers were interviewed in depth, on the basis of the questionnaire.

The impact of percolation tanks is fully discussed in the latter half of this Chapter. The main findings in respect of the impact of percolation tanks are stated below :

Similarly, it is seen that the construction of percolation tanks has led to :

- A) Increase in land under irrigation.
- B) Increase in land under commercial crops.
- C) Increase in the availability of drinking water facilities.
- D) Increased afforestation activities and
- E) Increase in the total area under cultivation.

Tank irrigation as compared to other methods of irrigation is economical and more suitable source of irrigation in the area under study.

It is to be noted here that command area of a percolation tank is technically determined by the difference between pre-tank well irrigation potential and post-tank well irrigation potential for which the concerned department usually conducts a survey.