

**CHAPTER ONE**  
**INTRODUCTION**

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## CHAPTER ONE

### INTRODUCTION

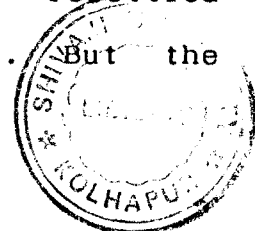
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Construction of a dam is not a new phenomenon. A number of dams of small, medium and large size have been constructed throughout India for various purposes, i.e.; irrigation, power generation, water supply for big cities, industries etc.. The river dam constructions are closely attached with green revolution in India, especially in the post-Independence period. But at the same time they have created some basic problems like resettlement and rehabilitation of the project-affected people. According to a conservative official estimate<sup>1</sup> the number of people displaced by various development projects since Independence like dams, mines and power plants, has gone up to 20 million. It has been estimated that out of the 20 million displaced people, 14 million are displaced due to the ambitious dams since Independence in India. The figure does not include all the project-affected people. A very large number of people are not even considered as project-affected. Especially in the river-dam projects there is a need to re-examine the concept of resettlement. The astounding fact is that despite the magnitude of displacement, there is no national policy to cope with

it. According to Central Government's Land Acquisition Act, which is basically British Government's Land Acquisition Act, was passed by British Crown in 1894.<sup>2</sup>

Since the Independence very little changes have been made in the Land Acquisition Act. Under this Act, the government can acquire any privately owned land for public purpose. Today government policy about the resettlement of river-dam-affected people is, the villages coming under direct submergence and the villages which are located near the Dam site are supposed to be the dam-affected villages. These villages shifted immediately because they had no alternative but to resettle somewhere else. The government officials try to resettle people whose land will inevitably be consumed by the river project. But the villages situated in the same catchment area of the dam, as the villages located on the top of the hills or at the edge of the hills, along the spurs of the valleys are totally ignored and neglected. These are the forgotten victims of the development. The government officials, planners and even the environmentalists and human rights lobby have ignored and neglected these indirect project-affected people.

As the river dam project comes up, the villages coming under the direct submergence are resettled somewhere in the down-stream command area. But the



villagers who have lived for centuries alongwith these displaced people at slightly higher altitudes in the same catchment area becomes isolated. They are set apart physically, socially, economically, politically from other people, places and organizations. Almost they become 'Islanders' or 'Isolated'.<sup>3</sup> Unfortunately, the people have not been rehabilitated satisfactorily. Then who will take care of these isolated small villages situated in the remote catchment areas. There is a lack of reliable studies available on the isolated villages located in the river dam catchment areas.

#### 1. THE PROBLEM:

Such isolated villages are facing a number of problems. As the area under the reservoir rises, the means of livelihood of the villages are cut off, due to the loss of terrain, besides which their means of transport and communications get submerged. All these factors gradually result in isolation of these villages. As already stated, these villages are set apart physically, socially, economically and politically from other people, places or organizations especially in the remote hilly areas like Sahyadri, where several river-dams are constructed. The villagers living in the catchment areas of river-dams are struggling for their survival. They have been forced into abject poverty.

They are suffering in the name of public purpose and national interest.

## 2. THE HYPOTHESIS:

It is hypothesized that the villages located in the catchment area of Warana Dam have been isolated due to the construction of the dam.

## 3. THE STUDY REGION:

The present study concerns itself with the isolated villages in the catchment area of Warana Dam (Map No. 2). The construction of this biggest earthen dam on the river Warna, a major tributary of Krishna river, was started in 1976 near Chandoli village in Sangli district. The head works for Warna Project were almost complete by June 1993 and created full storage of Vasant Sagar<sup>4</sup> (28 TMC by Sep. 1993). The total catchment area of Warna Dam is 301 sq km spread in Western part of Sangli and North-western part of Kolhapur district. It has also covered some parts of Satara and Ratnagiri districts. The total submerged area is about 4,500 hectares. The direct submerging 18 villages of Sangli district and 9 villages of Kolhapur district were resettled by June 1986 in the command area of Warna Dam. Since June 1986 the Vasant Sagar coming up step by step, the remaining 14 villages of Sangli district,

7 villages of Kolhapur district, 3 villages of Satara district and 1 village from Ratnagiri district are struggling for their survival. They are isolated from the rest of the world. It is in this context that we made a thorough enquiry of these isolated villages in the catchment area of Warna Dam.

#### 4. OBJECTIVES OF THE STUDY:

Today, the people living in the catchment area of Warna Dam are facing so many problems. Since 1986 the catchment area of Warna Dam has been declared as wildlife sanctuary (State reserve forest). On 30 September and 8 December 1993 the villagers experienced a series of earthquakes.<sup>5</sup> It has been proved that the epicentre of the earthquake is at Chandoli (Kd) just 20 Kms away from the Warna Dam site in the northwest direction. During July 1993 to December 1993 the villagers experienced earthquake almost every day. One thousand earthquakes of medium intensity are recorded on the seismograph at Warnavati centre during July 1993 to 8 December 1993.<sup>6</sup> Since then the series of low and medium intensity earthquakes has become a routine of villagers living in the catchment area of the Warha Dam. The villagers are living with the wild animals in addition to these earthquakes which cause a constant fear in the minds of the residents in this area.

The Maharashtra State Government had made a plan of resettlement of these earthquake-affected people living in the catchment area but the villagers did not want to shift to the area proposed by the State Government's proposal for relocation in Mangalwedha Taluka of Solapur district.

• Thus, the villagers living in the catchment area of Warna Dam are facing multilateral problems. The main objectives of the present study are as follows:

- (1) Identification of the isolated villages
- (2) The geographical analysis of the isolated villages regarding their physical and environmental setting, landuse pattern, population structure etc.
- (3) The village layout, socio-economic changes and the impact of river dam construction
- (4) The measurement of social fabrication and economic linkages [in respect over time and distance (spatial)]. The spatial changes due to the isolation
- (5) The measurement of the attitudes of the villages regarding the resettlement and rehabilitation.

##### 5. SCOPE AND LIMITATIONS OF THE STUDY:

The present study deals with the geographical aspects of the villages situated in the catchment area.



of the Warna Dam. There is wide scope for the study regarding human geography, economics, sociology, environmental sciences etc., in the region. We got the unique examples of the various aspects in this isolated area which are multifarious and interlinked. This situation demanded an inter-disciplinary approach. That<sup>o</sup> is why we applied different tools and techniques from different disciplines for the purpose of analysis. The scope of the present study could be described as follows:

- (1) The geographical analysis of the villages situated in the catchment area of the Warna Dam
- (2) Spatial changes made in these villages in terms of social fabrics and economic linkages due to the construction of the dam
- (3) A perceptual study of the people living in the study area regarding their resettlement and rehabilitation. Measurement of attitudes of the isolated people towards the resettlement and rehabilitation in terms of mental maps.

The present study has certain limitations -

- (1) This study is the first of its kind. Unfortunately there is no national policy to cope with

the displacement due to the development project. There are no ready-made theoretical approaches available to analyse this sort of a situation and it is through trial and error method that the understanding of the problem had to be developed. Though there are several sociological and socio-anthropological studies made, most of the studies are concerned with the problems of the villages which come under the direct submergence of the river dam. No one has paid attention towards these forgotten victims of development.

- (2) The situation regarding the resettlement of the villages situated in the catchment area of Warna Dam is unassailable and their sufferings multiple. Firstly they are Dam-affected villages, secondly they are sanctuary-affected and to crown it all, recently they have had the nature's fury by way of earthquakes. So, there are a number of problems this area is encountered with. All the same, we have tried to make our recommendations as clear and scientific as possible.
- (3) There is a lack of clear-cut definition about

the 'project-affected villages'. The present policy of government does not cover the multi-dimensional aspects of the problems created by a river dam construction in the catchment area, especially in the hilly rugged area like western ghats (the Sahyadri). There is a wide gap between government's present policy about the rehabilitation and the factual situation in the catchment area of a river dam. We have tried to bridge the gap.

#### 6. METHODOLOGY:

It is an empirical survey of the isolated villages in the catchment area of Warna Dam. Suitable cartographic and statistical techniques are used for the purpose of spatial analysis. The analysis includes both the more stable aspects of landuse in its natural environment and more dynamic human activities in its social and economic settings.

#### 7. COLLECTION OF PRIMARY AND SECONDARY DATA:

The present work has been carried out with the help of three principal sources, viz., (1) field-work for the acquisition of new data, (2) direct observations of the phenomena associated with landuse pattern, (3) settlement pattern, resettlement and environmental

adjustment with the help of field mapping and interviewing procedures. The author himself collected the field data through questionnaires and interviews of the concerned people involved in the process of resettlement. The author also met several persons concerned with the problems of the isolated villages, i.e., villagers, local leaders, Sarpanchas of the concerned villages, Talathis and V.D.O., activities of the 'Warna Dam Affected People's Samiti', government's officials, officers of the Warna Irrigation Project, Forest Department officials.

Also we arranged a number of trekking camps in the catchment area of Warna Dam to collect first-hand information and data. A number of organised field studies were undertaken during different periods of the year. Schedules were prepared and interviews based on the questionnaires were taken with the heads of each and every family of the selected villages.

(A) The secondary data sources include the published reports of the dam divisions, Forest Department, Revenue Department and Socio-economic abstracts, Census Handbook, District Gazetteers, newspaper articles, periodicals (India Today, Lokrajya etc.). All these helped us in getting better picture of the problems of these villages

(B) Library sources provided search and survey materials in the form of books and reports.

(C) Cartographic source.

The existing maps prepared by the cartographic division of the Warna Irrigation Project, Forest Department and myself are used for analysis, so also the photographs and field sketches are analysed for better understanding of the problem.

#### 8. PROCESSING OF DATA AND SAMPLING TECHNIQUES:

Sampling techniques are used to select proper representation of the villages in the catchment area. Landuse surveys were conducted at micro-level using field techniques. Sampling techniques are used for both the purposes of landuse studies and selecting villages for the interviews. Ten per cent, i.e., 3 villages out of 25 are selected for the case studies in different geographical settings using stratified weighted sampling techniques.

Data collected from different primary and secondary sources were processed, tabulated and transformed into graphs, diagrams, sketches and maps. Socio-economic surveys were made. These surveys, maps, field sketches, photographs, diagrams, interviews were analysed. The results of the study are based upon the interpretations

of these maps, diagrams, sketches and photographs in the present study.

#### 9. ORGANIZATION OF THE STUDY:

The entire study is organised into six chapters. The first chapter presents the information about the problem, objectives, scope and limitations, methodology and review of literature. The second chapter projects the physical and environmental setting of the catchment area of Warna dam. The third chapter highlights the problems in the isolated villages. Case studies have been undertaken to study the detailed profile of the villages which is the subject-matter of the fourth chapter. Chapter five gives us the information about the attitudes of the villagers living in the catchment area of Warna dam towards their settlement and rehabilitation. This study is mainly based upon their perceptions. The last chapter attempts to summarize the findings of the study. The references are given at the end of every chapter.

#### 10. REVIEW OF THE PERTINENT LITERATURE:

Though there are several socio-economic, geographical, socio-anthropological studies made in this field, all the studies deal with the problems of direct submerging villages, i.e., Vidyut Joshi.<sup>7</sup> R.B. Patil and Dr. S.N.

Pawar,<sup>8</sup> Dr. R.N. Hardikar,<sup>9</sup> P.R. Sawant,<sup>10</sup> Dr. Irawati Karve and J. Nimbalkar,<sup>11</sup> and Jagdish Singh.<sup>12</sup> (Listed in references).

The present study is inter-disciplinary in nature, which concerns different disciplines such as geography, sociology, economics, political science, socio-anthropology etc.. Thus the study of the isolated villages demands different types of tools and techniques for the analysis and also an inter-disciplinary approach.

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