

UTILISATION OF CANAL IRRIGATION  
FACILITIES IN MAHARASHTRA  
(CASE STUDY OF GHOD AND PURNA PROJECTS)

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## PREFACE

In a country like India where agriculture is a dominant sector, the development of irrigation facilities assumes great importance. After Independence, highest priority has been accorded to the irrigation development in the country's five year plans. Although the overall picture of the utilisation of the irrigation potential so far created in the country seems to be satisfactory, the position of the states like Maharashtra is very disappointing in this respect. In fact, the state government is quite concerned about the full exploitation and efficient management of the available water resources ever since the formation of the state but the gap between the potential created and utilised is widening.

In the present study an attempt is made to examine the problems of utilisation of irrigation potential created on some of the major irrigation projects located in different physico-geographic regions of Maharashtra. In order to understand the actual position of utilisation and to arrive at definite conclusions it was felt necessary that the selected irrigation project should be fully developed where the irrigation potential should have been created not less than ten years prior to the study. Accordingly, two case studies of major irrigation projects viz. Purna and Ghod were selected where the irrigation potential has been created before 1970.

(iii)

The projects were selected from the two major agro-climatic zones of the state, viz. the assured rainfall zone in Marathwada and the drought prone tract of Western Maharashtra.

### Objective

The specific objectives set for the present study are as under:

(i) To examine the cropping pattern actually developed on the selected irrigation projects and that proposed for these projects.

(ii) To find out the extent of utilisation of the potential created by the projects.

(iii) To analyse the reasons for the lag in the utilisation of the created potential.

(iv) To make a comparative study of these two cases in respect of different aspects such as cropping pattern, extent of utilisation, causes of under-utilisation.

(v) To suggest measures to improve utilisation.

### Methodology and Collection of Data

The present study is primarily based on secondary sources of data. The relevant data and information have been collected from the concerned Command Area Development Authorities for the Purna and Ghod projects at Nanded and Pune respectively. This was supplemented by approaching Irrigation Departments at Basamathnagar and Sirur. Information

relating to the project history and its salient features, proposed cropping pattern, the area actually irrigated, rainfall, quantity of water available and utilised, transit losses, causes of under-utilisation of the irrigation facility was obtained from various published and unpublished sources like project reports, the Annual Administration Reports of CADA, Rainfall Data Register and Water Account Register.

Further, valuable information regarding the cropping pattern, causes for under-utilisation, the attitude of the farmers, impact of the project performance of the CADA and the related aspects was obtained through discussions with the Administrator, Executive and Deputy Engineers and Agricultural Officers. In addition, a few cultivators in the Purna command area were personally interviewed to learn about the problems they face in relation to the application of irrigation water.

There were a number of difficulties faced by the author in collecting the required data and information. In some cases data were not properly collected and maintained while in other cases available data were not reliable. In such cases, attempt was made to obtain the requisite data from alternative sources.

Besides these, non-availability of the concerned person was observed to be a common phenomenon which resulted in considerable wastage of time. A few officers and staff

members were not ready to provide the necessary data/information as they thought that these are of a confidential nature. However, on the whole, the cooperation given by the concerned authorities was satisfactory. All possible efforts were made to bring the data and information up-to-date.

In addition to the data collected on Purna and Ghod projects, information on irrigation development in Maharashtra, utilisation of the irrigation potential created, reasons for non-utilisation, etc. was obtained consulting a variety of published reports of the commissions and committees appointed by the Government - Maharashtra State as well as the Central Government.

This study is divided into five chapters. The First Chapter is an introductory chapter which gives a brief account of the water resources, ultimate irrigation potential, development of irrigation, irrigation potential created and its utilisation in India as well as in Maharashtra. Chapter II examines in detail the numerous reasons for under-utilisation of the available irrigation facility and the various measures that are necessary to accelerate the pace of utilisation. Chapter III and the Chapter IV deal with the Purna and Ghod projects respectively in which a brief history and the salient features of the project, planned cropping pattern and the area actually irrigated, extent of utilisation, problems of utilisation and other aspects are presented in detail. Chapter V gives a summary and conclusions of the study.

## C O N T E N T S

	<u>Page No.</u>
ACKNOWLEDGEMENT	(i)
PREFACE	(11)
LIST OF TABLES	(vii)
LIST OF MAPS	(x)
LIST OF GRAPHS	(x)
 <u>Chapter</u>	
I            IRRIGATION DEVELOPMENT AND UTILISATION	1
II            REVIEW OF LITERATURE ON CAUSES OF UNDERUTILISATION OF THE CREATED IRRIGATION POTENTIAL	23
III           PURNA RIVER VALLEY PROJECT	49
IV            GHOD RIVER PROJECT	91
V             SUMMARY AND CONCLUSION	132
APPENDICES	153
BIBLIOGRAPHY	169

LIST OF TABLES

<u>Table No.</u>		<u>Page No.</u>
1.1	Outlay and Development of Irrigation Potential	6
1.2	Use of Maharashtra's Water Resources (1982)	10
1.3	Financial Investment and Development of Irrigation Potential in Maharashtra	14
1.4	Utilisation of the Created Irrigation Potential on Major and Medium Schemes in the State	16
2.1	Water Requirements of Different Crops	40
3.1	Soil Classification of the Command Area of Purna Project	54
3.2	Approved Cropping Pattern of Purna Project	55
3.3	Stages of Creation of Irrigation Potential on Purna Project	56
3.4	Area Irrigated During 1962-63 to 1967-68	56
3.5	Area Irrigated under Various Crops During the Period from 1968-69 to 1983-84	60
3.6	Classification of Cultivators into Different Group of Land Holding	64
3.7	Area Irrigated under Kharif Rice, Wheat and Rabi Jowar	69
3.8	Recommended Number of Waterings to Different Crops under Purna Command	70
3.9	Application of Irrigation Water from Canal and Wells	72



(viii)

<u>Table No.</u>		<u>Page No.</u>
3.10	Proportion of Area Actually Irrigated to the Proposed Cropping Pattern	78
3.11	Utilisation of the Project Potential in Purna Command	82
3.12	Transit Losses During the Rabi and Hot Weather Seasons	84
4.1	Distribution of the Soils in the Ghod Command Area	94
4.2	Proposed Cropping Pattern in the Command of Ghod Project	95
4.3	Revised Cropping Pattern for the Ghod Project	96
4.4	Stages of Creating Irrigation Potential	97
4.5	Irrigation Potential Created and Utilised in the Ghod Project	98
4.6	Details of Seasonwise Irrigation Potential Created and Utilised	99
4.7	Seasonwise Utilisation of Water	101
4.8	Area Actually Irrigated During the Period from 1970-71 to 1983-84	103
4.9	Potential and Seasonwise Utilisation of Water on Ghod Project	104
4.10	Area Irrigated under Various Crops During the Rabi Season	108
4.11	Area Irrigated During Hot Weather Season	109
4.12	Utilisation of the Project Potential	114
4.13	Reasons for Non-utilisation of Water During Kharif Season	118
4.14	Planned Utilisation of Water	121

(ix)

<u>Table No.</u>		<u>Page No.</u>
4.15	Seasonwise Area Irrigated and Water Utilised	122
4.16	Actual Utilisation as Percentage of Planned Water Utilisation During Different Seasons	123
4.17	Average Area Irrigated During the Period 1976-77 to 1983-84	124
4.18	Transit Losses on the Ghod Project : 1970-71	126
4.19	Transit Losses During the Rabi Season	127
4.20	Transit Losses During the Hot Weather Season	128
5.1	Comparison between Purna and the Ghod Projects	139

LIST OF MAPS

<u>Map No.</u>		<u>After Page No.</u>
11	Map Showing the Purna Project Command	52
22	Map Showing the Ghod-Weir Project Command	93

LIST OF GRAPHS

<u>Figure No.</u>		<u>After Page No.</u>
1	Percentage of Utilisation on Purna Project	81
2	Utilisation During Kharif, Rabi and Hot Weather on Purna Project	81
3	Utilisation of the Project Potential on Ghod Project	113
4	Utilisation During the Kharif and Rabi Season on Ghod Project	113

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