



# A Study on the Impact of the Changes Due to the Irrigation System in the kakadi Amba dam and Chopdavav dam of Narmada district

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## Abstract:

*The motive behind studying this subject is to know about the villages and members taking benefit of the Kakadi Amba and Chopdavav dam, to know about the irrigation system of the dam, to know about the changes in the quality and production of the grain due to the dam and to know about the changes in the education due to the dam. The researcher selected two dams of Narmada district and the beneficiary villages. The information is collected by preparing a questioner keeping an aim of the subject. After study the subject, it is said that, if the government provide this type of co operative irrigation system to all the farmers then the problems related to irrigation will be resolved.*

**Keywords:** Dam, Education, Grain, Irrigation, Production, Scheme

## 1. Introduction

India is an agricultural based country. The government implemented different types of small, medium and huge irrigation system to uplift the financial condition and the production of grain. Crores of rupees are invested in these schemes. And also the government has to spend crores of rupees to maintain it every year. But the objectives, which are set for the scheme, are failed and the irrigation also can't be done as per the prediction.

After getting negative results, the government had decided the partnership of the farmers and implemented a policy of joint irrigation management in 1981. This policy ran for the three years but due to the weakness of the policy it isn't worked till long. After doing necessary changes in the policy, the co operative irrigation participate management policy is implemented in 1995. For this different types of 13 pilot projects are selected. By this way, the government got effective results of this farmers participation policy of co operative irrigation system. This study is selected to know how the villagers of Chopadvav and Kakadiamba brought changes in the irrigation field by joint efforts including the people of Chopdavav with 'the Sanjeevani Irrigation co operative society' and the villagers of Kakadi Amba with 'the Navjagruti irrigation society'.

## 2. Objective of Study

1. To know about the beneficiary villages and members of the Kakadi Amba and Chopdavav dam selected for the study.
2. To know about the information related to the irrigation of the Kakadi Amba and Chopdavav selected for the study
3. To know about the changes occurred in the quality of the grain and its production due to the Kakadi Amba and Chopdavav dam selected for the study.
4. To know about the changes in the education due to the Kakadi Amba and Chopdavav dam selected for the study.

### 3. Limitation

1. All the villages of Gujarat are not covered for the study
2. In this study, personal study is not taken of the farmers, getting benefit of the irrigation.

### 4. Selection of Sample

Two dams of Sagbara taluka in the Narmada district including Kakadi Amba dam and Chopadvav dam has been selected for the study. 15 beneficiary villages of Kakadi Amba dam and 22 beneficiary villages of Chopadvav dam which are taking benefit of irrigation are selected for the study.

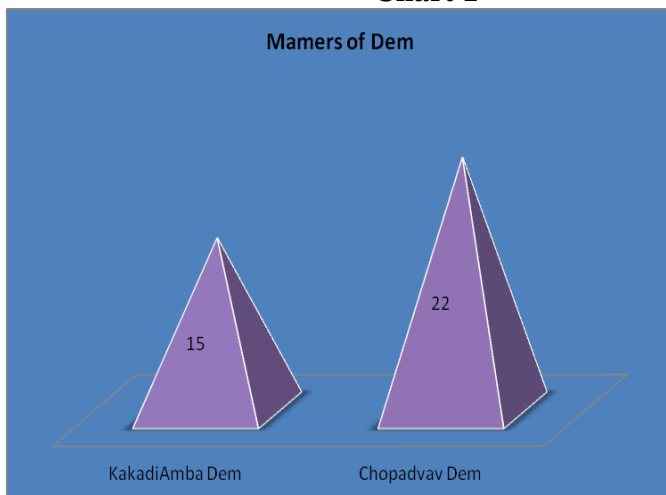
### 5. Methodology

This information is collected by preparing a questionnaire keeping an aim of the study. Questions are asked to the farmers of the villages who are taking benefit of the irrigation by visiting personally. And the collected information is set as per the category.

### 6. Result and Discussion

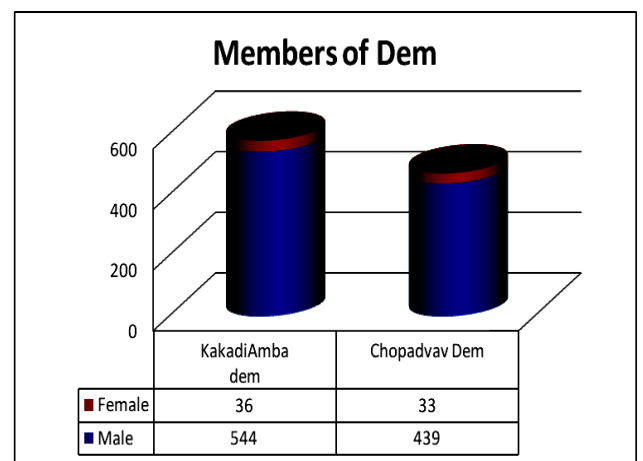
The Chopadvav and Kakadi Amba dam started in 1981. After the implementation of the government's co operative irrigation policy, the villagers of Chopadvav and Kakadi Amba jointly formed new societies in which 'The Sanjeevani Irrigation copoerative society' is connected with Chopdavav and The Navjagruti Irrigation cooperative society' is connected with Kakadiamba. The aim of the society is to supply water to all the farmers. In which there is a committee which do meetings and try to solve the problems of the farmers. It also distributes the water similarly and got the guidance from the government and other institutes. The table below shows how revolutionary changes are seen in the field of irrigation, quality of the grain and in the field education.

**Chart 1**



According to the chart no.1, the beneficiary villages of the Chopadvav dam is 22 and among them 20 villages got benefit of it. Irrigation is not done in the 2 villages because there is no canal in it. Beneficiary villages of the Kakadi Amba dam is 15 and among them almost all the villages got benefit of it.

**Chart 2**



According to the chart no.2 around 472 members are connected with the Chopadvav Dam in which men are 439 and women are 33. While the Kakadi Amba dam has 580 members in which men are 544 and women are 36.

**Table 1: Command Area (in hector)**

Area	Kakadi Amba Dam	Chopadvav Dam
Total Command Area	1060	2170
Ploughing suitable Area	891	1400
Irrigation suitable Area	798	1020

Total command area of the Kakadi Amba dam is 1060. In which ploughing suitable area is 891 and irrigation suitable area is 798. Total command area of Chopadvav dam is 2170. In which ploughing suitable area is 1400 and irrigation suitable area is 1020.

**Table 2: Numbers of canals for irrigation facilities**

Canals	Kakadi Amba Dam	Chopadvav Dam
Main Canal	01	01
D.O	37	05
Minor	05	10
Sub Minor	02	06

Canal facility is seen for the irrigation. In which with the main canal, planning of D.O, Minor and Sub minor canal is done so that a farmer can get the benefit of irrigation upto the farms. Water is released from the main canal. First of all it is supplied to the far away areas and then after it is supplied to the medium and upper level area. An operator is appointed for the water distribution. With the main canal in the Kakadi Amba dam, D.O – 37, Minor – 5, Sub Minor – 2 are noted. While with the main canal in the Chopadavav Dam, D.O – 5, Minor – 10, Sub Minor- 6 are noted.

### 7. Impact on the grain production

- Before irrigation, the farmers are farming for the grains like paddy, juvar, pulse, makai. But after the study it is clear that,
- Farmers grow wheat, cotton, tuvar, soya bin, vegetables and grass.
- In the summer grain they grow mag, groundnut, makai, bajri and watermelon.
- In the monsoon grain they grow paddy, soya bin, pulse, makai, hybrid juvar etc...
- For every season grains they grow sugar cane, banana, papaya, fruits, vegetables etc...

### 8. Changes of education

On the basis of the study it is known that, the beneficiaries who are coming for the purpose of study can't give proper education to their children. But after getting benefit of this scheme, after improving the financial situation, they are now providing proper higher education to their children. Mind of the people is changed after changing the level of education. Even, a level of education is increased in the women too.

### 9. Conclusion

Sagbara taluka of Narmada district, selected for the study, is very well known for the tribal community. All the people of the area are depended on the agriculture and its related industries to run their life. After an implementation of the co-operative irrigation system, the farmers are getting more benefit of it and in the result of it, changes are seen in the quality of the grain, production and even in the education. If the government spread this technique in the villages of the whole state, a revolutionary change will bring out in the lifestyle of the people depended on the agriculture.

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