



Geographically Jabalpur is situated 23°10 N 79°56 E. Its total area is 5197 square kilometer.

Altitude of Jabalpur is 1348 feet above the sea level. Its summer temperature is 47°C (maximum) and 21°C (minimum) while it varies from 27°C to 8°C in winter.

As per census 2011, Jabalpur district has a population of 2460714.

2.1. Objective of study

To understand increase in production by the project.

To study irrigated and not-irrigated area and its impact on production.

To study the increase in production by increasing irrigation facilities.

2.2. Research methodology and data collection

To study this research, data have been collected based on secondary data collection method from various District statistics papers and agriculture data from government websites. To analyze the data simple mathematical calculations are used.

2.2.1. Irrigation Project

Irrigation is a method by which water is distributed to soil naturally or artificially, which helps to increase in agriculture and plant production. Irrigation project implement as large, medium or small scale. In case of less than average rains or in case to distribute sufficient and required water for irrigation various small canals are built, which directly help agriculture.

Not only, irrigation project, help to fertile lands, but it also help to convert non-fertile land into fertile land to boost the agriculture and its production. The main purposes of irrigation projects are to distribute sufficient water and to avoid crisis.

Jabalpur district is agriculture oriented district and the producer of many food grains and agriculture products. To increase the production of agriculture irrigation facilities are important to be provided time to time. There are many projects in Jabalpur district like – Rani Awanti Bai Sagar Pariyojna, Apar Paryat Sichai Pariyojna, Devri Talab Pariyojna, Hatoli Talab Priyojna and Chhatarrpur Talab Pariyojna.

There is an important place to irrigation projects in Jabalpur which is not limited to agriculture irrigation, but extended to electricity production and fisheries production, which help to boost the economical advantages to make it self-dependent

2.2.2. Rani Awanti Bai Sagar Pariyojna

Rani Awanti Bai Sagar Pariyojna project is built on, so called Madhya Pradesh life line “Narmada” river. Rani Awanti Bai Sagar Pariyojna is famous as “Bargi Dam”.

Bargi dam is 43K.M. from Jabalpur situated near Mankeri Village. There are two major canals are subdivided as left Canal and Right Canal.

The canal which extended from left of dam, which is 17 K.M., cover Jabalpur, Patan of Jabalpur district, and this canal also covered other district as well like Narsingpur district. This canal serves the irrigation possibilities on approx. 1.57 lack hectare land.

The right canal serves approx. 2.45 lack hectare land of Jabalpur as well as Katni, Satna and Rewa district.

In total these two canals help approx. 4 lack hectare lands for annual irrigation.

The first stone placed for Bargi dam in 1975 and it continue to 1988, in 1988 two electric projects of 45 MW each. Till December 2002, Government had collected the revenue of 1602 crore.

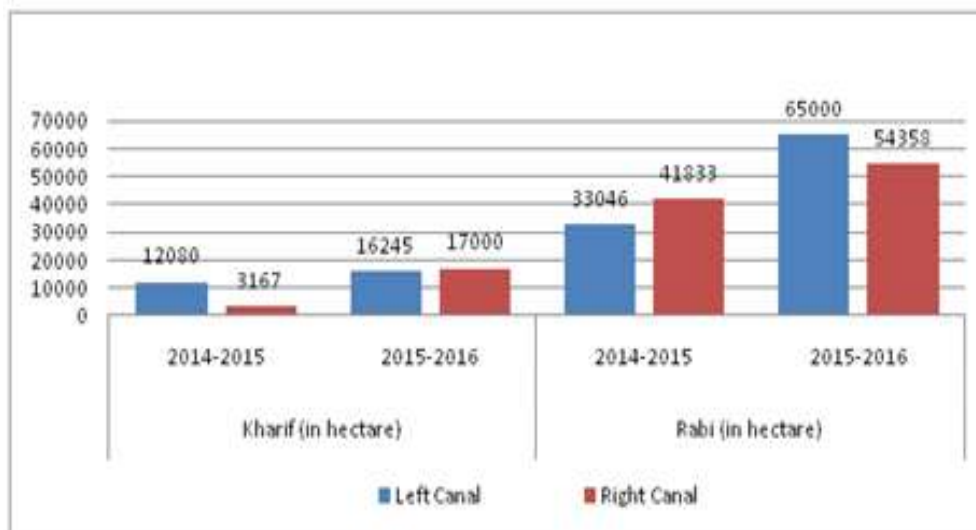
This project also commits the drinking water as well as this helps Government to collect additional 70 lack revenue from fisheries production, which increased up to 325 tons.

Rani Awanti Bai Paiyojna is a large project which is helping into additional agriculture production of approx. 17.13 lacks MT which serves 1.57 lack hectare and 2.45 lack hectare land with help of left and right canals respectively.

The possibilities of irrigation lands are changed from this project year by year. We can also see some data between two years which shows the change between two years for “left canal and right canal” in table 2.2.2(a) and Graph 2.2.2(a)

Table 2.2.2 (a)

Canals /Year	Kharif (in hectare)		Rabi (in hectare)	
	2014-2015	2015-2016	2014-2015	2015-2016
Left Canal	12080	16245	33046	65000
Right Canal	3167	17000	41833	54358



Graph 2.2.2(a)

In above table and graph 2.2.2(a), we can observe that there is an increase of irrigation land than in 2014-2015 to 2015-2016 in Kharif from 12080 to 16245 in left canal and from 3167 to 17000 in right canal area, similarly we can observe increase in irrigation area in Rabi season. Increase in irrigation facility and its area directly imply to increase in production of agriculture as well as fisheries production and similar industries.

2.3. Problems

There are many advantages of the irrigation projects, so as for the Rani Awanti Bai Sagar Pariyojna.

While studying its advantages, we have also observed some problems for this project which are as under;

2.3.1-Bad economic conditions of farmers to collect resources for better utilization of water from Irrigations Project.

2.3.2- Dirtiness in canals from projects like plastics which can create obstacles in supply of water to the agriculture lands.

2.3.3- Natural outbreaks which can spoil the crops.

2.3.4- Shift of people from Project land.

2.4. Solution

We tried to find out the possible solutions for the problems given in (2.3). Please refer the possible solutions as under;

2.4.1 – Bad economic conditions of farmers : Government are running many schemes which can provide easy loans to farmers by which they can buy pipes and sprinklers which can better supply the waters to farm lands, they can also buy the electric pumps on subsidies rates. “Kisan Credit cards” are also a good step to help farmers & to provide economic supports as a credit.

2.4.2 – Dirty Canals: For proper and healthy supply of water we need to maintain the rivers, dam and canals clean and free from the wastes like plastic, industry wastes, etc.

To maintain cleanliness of water in rivers, so in dams, so in canals (i.e. all types of water resources), Government has launched Swaksha Bharat Abhiyan with the help of every citizen at every level. Its impact and awareness are positive. M.P. state Government also “Narmada Bachao Abhiyan” which is positively showing its clean impact on Narmada and this project.

2.4.3 – Natural Outbreaks: To swift recover from natural outbreaks Government announce the insurance of crops which can at least help to recover the investments of farmers.

Additionally, to protect them from natural Outbreaks, Government is also making aware farmers to make their extra/additional income from fisheries production, poetry farms and other small scale productions which motivate farmers in case of natural outbreaks .

2.4.4 - Government provided the monetary benefits to the people whose lands and homes are in the projected area. But to fulfill their emotions to mother land is always debatable in the benefit of mankind.

3. CONCLUSION

While studying the impact of Irrigation Projects on Agriculture development, we found many pros and cons.

There are always some advantages and disadvantages of any project, but as far as we understand from data Rani Awanti Bai Sagar Pariyojna has more advantages as it provides sufficient water to farmers for irrigations which not only making them economically independent but contributing in the income of people as a nation as agriculture production increases due to this project/Pariyojna.

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