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NABARD CONTRIBUTION IN AGRICULTURE AND RURAL DEVELOPMENT WITH SPECIAL REFERENCE TO WATERSHED PROJECT UNDER RIDF SCHEME IN INDIA

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ABSTRACT

The Government of the India is giving emphasis on ‘Growth with Social Justice’ with the basic objective of planning for the development of India since its independence and made significant strides in developing rural India through Five Year Plan. A Rural Infrastructure Development Fund (RIDF) was introduced in the budget of 1995-96. The RBI governs this fund through NABARD with corpus from the nationalized banks. The NABARD was setup by the Government of India as a development bank in July 12, 1982 which operates through its head office at Mumbai, 28 regional offices situated in state capitals and 391 district offices at districts levels. The mandate also covers supporting all other allied economic activities in rural areas, promoting sustainable rural development. The various functions of NABARD are supervisory functions, institutional and capacity building, role in training etc. The paper analyses some of the issues that arise in the context of utilization of the fund under watershed for farm irrigation in Agra District of Uttar Pradesh, India

Keywords: Rural, development, agriculture, finance, credit.

INTRODUCTION

Agricultural credit is considered as one of the most basic input for conducting all agricultural development programmes. In India there is an immense need for proper agricultural credit as the economic condition of Indian farmers are very poor (Morris, 2003). From the very beginning the prime source of agricultural credit in India was money lenders. After independence the Government adopted the institutional credit approach through various agencies like co-operatives, commercial banks, regional rural banks etc. to provide adequate credit to farmers, at a cheaper rate of interest. Moreover with growing modernization of agriculture during post-green revolution period the requirement of agricultural credit has increased further in recent years (Meenakshi, 2008).

NABARD was established on the recommendations of Shivaraman Committee (Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development) on 12 July 1982 to implement the National Bank for Agriculture and Rural Development Act, 1981; than existing national level institutional such as Agricultural Refinance and Development Corporation (ARDE), Agricultural Credit Department (ACD) and Rural

Planning and Credit Cell (RPCC) of RBI were merged with NABARD with a paid up capital of Rs. 500 crore equally contributed by Reserve Bank of India. It operates through its head office at Mumbai, 29 regional offices, one each in major states, 10 sub-offices in smaller states / union territories and 391 district offices (Kumar, 2015).

In our country, while the importance of rural infrastructure has been well recognized, adequate measures to improve the same are not forthcoming. Amongst many other constraints, the poor financial health of the states is the major cause for the state of affairs we observe today. Not only rural infrastructure development projects are inadequate in number, many projects sanctioned and many that were even started remain incomplete due to various reasons. Noting these problems, in the Union Budget Speech of 1995-96, the Union Finance Minister announced that Inadequacy of public investment in agriculture is today a matter of general concern. This is an area, which is the responsibility of States. But many States have neglected investment in infrastructure for agriculture and rural areas (Meenakshi, 2006).

The Rural Infrastructure Development Fund (RIDF) was initially developed to provide resources for projects that

remained unfinished due to want of resources, but later extended to new projects as well. RIDF was launched in 1995-96 with an initial corpus of Rs 2,000 crore through contributions both from public and private sector banks. In this background, the present paper looks at the watershed project for irrigation under RIDF (Rajaraman, 2003).

MATERIALS AND METHODS

The present study has been conducted in Bah and Jaitpur Kalan blocks of Agra district as both the community blocks were purposively selected, while for the selection of

villages, a list of villages under watershed project of RIDF is obtained by NABARD Regional office, Agra District, and thereafter seven villages were selected where watershed project work have been completed successfully. After the selection of village 125 respondents and 15 groups were randomly selected to fulfill the specific purpose of the present study. The data were collected through pre-structured interview schedule and questionnaire and then data were analyzed, tabulated and find out the percentage etc for the meaningful research (Singh *et al.*, 2018).

RESULTS AND DISCUSSION

Table 1 : Sample Selection of farms of Bah-Jaithpur Kalan blocks

| SN | Farm Size Groups | No's of Farms | Group(s) | Land in ha |
|-------|------------------|---------------|----------|------------|
| 1. | Marginal Farmers | 30 | 04 | 35.00 |
| 2. | Small Farmers | 60 | 06 | 100.00 |
| 3. | Medium Farmers | 25 | 03 | 750.00 |
| 4. | Large Farmers | 10 | 02 | 80.00 |
| Total | | 125 | 15 | 290.00 |

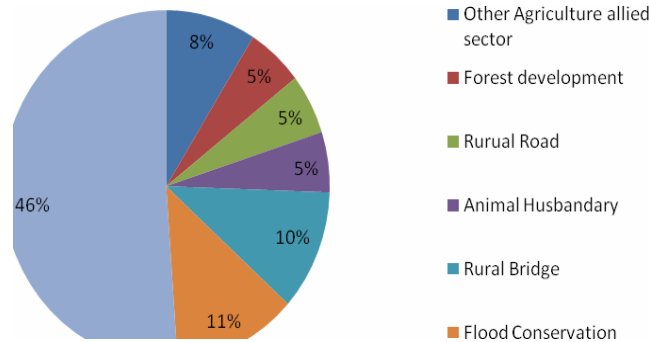


Fig. 1 : Sector wise distribution of fund sanction under RIDF by NABARD

Table 1 reveals that the total number's of farm were 125 and 15 number of groups were available in Bah-Jaithpur Kalan having total land of 290 ha on the beneficiaries of the scheme under RIDF, also the Figure 1 shows; the sector wise distribution of fund sanction under RIDF by NABARD in Agra District.

An overview of current Infrastructure of Development Fund Project in Agra:

1. The cost of the project of Ethmadpur Animal Hospital which is constructed PWD department is Rs 33.21 lakh.
 2. Chambal lift canal project cost Rs 30.00 crore.
 3. Fatehabad Rihawali to Dhanaula road project cost of Rs 11.50 crore.
 4. Bah-Jaithpur watershed project cost is Rs 3.84 crore.
- Details of the plans on NABARD approved under the various consignment of RIDF in the district are as follows:

Table 2 : Approved Fund under RIDF in Agra District (Rs in Crore)

| SN | Tranche | Name of Project | No. of Project | RIDF Money |
|-------|---------|-----------------------|----------------|------------|
| 1. | (XIII) | Watershed | 2 | 940.92 |
| 2. | (XIV) | Irrigation | 24 | 553.28 |
| 3. | (XIV) | Rural road | 11 | 212.43 |
| Total | | | 38 | 1706.63 |
| 4. | (XVI) | Watershed | 2 | 932.11 |
| 5. | (XVI) | Bridge | 2 | 269.12 |
| 6. | (XVI) | Irrigation | 3 | 504.04 |
| 7. | (XVI) | Road | 23 | 1068.76 |
| Total | | | 30 | 2773.03 |
| 8. | (XVII) | Animal hospital | 2 | 40.4 |
| 9. | (XVII) | Bridge | 1 | 1590.28 |
| 10. | (XVII) | Rural road | 24 | 812.6 |
| 11. | (XVII) | Basic rural structure | 3 | 125.19 |
| Total | | | 30 | 2568.57 |
| 12. | XVIII | Watershed | 2 | 2558.47 |
| 13. | XVIII | Irrigation | 3 | 680.55 |
| 14. | XVIII | Rural road | 16 | 771.32 |
| Total | | | 21 | 4020.34 |
| 15. | (XIX) | Irrigation | 2 | 680.55 |

In study of watershed project and we observed works under this project and in what place and how much land or area was covered under this project; and how many farmers

benefited from this. Observations of watershed project in Agra District are as follows:

Table 3 : Location and Covered Area of Watershed Project (ha)

| Year | Name of Work | Location of Work | Covered Land |
|---------|-------------------------------------|--|--------------|
| 2016-17 | Irrigation channel | Pahadpura Village | 80.00 |
| | Pond & Dam | Reechapura, Fatehapura, Gadi, Villages | 120.00 |
| | Irrigation Channel Bore Well & Pond | Pratapura, Kortha , Navli Villages | 90.00 |

Table 3 reveals that in the selected area, the works of the watershed project in the year of 2016-17 and the work done under the watershed project is named. Where is the precise location of the watershed and how much land is covered under them. Various farms were found under project; so the beneficiaries of the project are farmers and their land. A similar study was carried out in the line with Walling *et al.* (2017).

Table 4 reveals how many farms comes the particular farm size groups and their covered agriculture land under the watershed project. Most farms are under small farm size group numbered 60 and covered 100.00 ha land which is highest. Number of large farm size group is less but the land covered in this group is greater than marginal farm size group. Covered land in marginal farm size group is 35.00 ha which is lowest. Therefore the number of small farm size groups was found to be most benefited and numbers of large farm size group was found less benefited. A similar study was carried out in the line with Bhattacharjee and Sharma (2021).

Season Wise Benefited Of Farms

Work done in watershed project such as irrigation channel Dam, Bore-well, pond etc, can benefit farmers during a special season.

Table 5 reveals that 130.00 ha land is under Kharif season and 95.00 ha land is under Rabi season and 65.00 ha land under Zaid season; so most farms can avail the watershed project and water facility in Kharif season and utilization of watershed project is better in Kharif season than Rabi and Zaid season, because most of farms could take intensive crop like paddy maize etc. So utilization of watershed project in Kharif season is better. A similar study was carried out in the line with Singh and Sharma (2019).

The affect of cropping intensity by watershed project is also an important factor, which indicates that the number of crops grown on a piece of land during the agriculture years. Even the cropping intensity helps to judge the watershed project by calculating the cropping intensity before and after the watershed project. The cropping intensity is calculated by collecting the old data by farms of studied block. Similar study was carried out in the line with Yadav and Sharma (2019).

Table 6 reveals that the overall average cropping intensity is 170.00 per cent; the cropping intensity of small farm size group is more than marginal, medium and large farm size group. The cropping intensity before watershed project is higher in marginal farm size group and less in other farm size groups. Similar studies were carried in the line with Jamir and Sharma (2018); Bhattacharjee and Sharma (2020).

Table 7 reveals that the overall average cropping intensity is 201.00 per cent; the cropping intensity of marginal farm size group after watershed project is more than other farm size groups. The cropping intensity decreases with increases in the farm size. It determines that more crops are taken by marginal forms as compared to big farms. Similar studies were carried in the line with Das *et al.* (2017); Chishi and Sharma (2019).

After comparing tables 6 and 7, we may conclude that cropping intensity of all types farm size groups has increased compared to the cropping intensity before watershed project and hence the overall cropping intensity of farms was extensive before the watershed project while overall cropping intensity of farms become intensive after the watershed project. This study shows that the farmers actually benefited from this project. Similar studies were carried in the line with Walling and Sharma (2014); Yadav *et al.* (2021).

Table 4 : Benefited Farmers by Watershed Project

| SN | Farm Size Groups | No's of Farms | Covered Land (ha) |
|--------------|------------------|---------------|-------------------|
| 1. | Marginal Farms | 30 | 35.00 |
| 2. | Small Farms | 60 | 100.00 |
| 3. | Medium Farms | 25 | 75.00 |
| 4. | Large Farms | 10 | 80.00 |
| Total | | 125 | 290.00 |

Table 5 : Season wise Benefited Farms under Project

| Sl. No. | Farm Size Groups | Total Land (ha) | Season wise Land (ha) | | |
|--------------|------------------|-----------------|-----------------------|--------------|--------------|
| | | | Kharif | Rabi | Zaid |
| 1. | Marginal Farms | 35.00 | 15.00 | 10.00 | 10.00 |
| 2. | Small Farms | 100.00 | 50.00 | 30.00 | 20.00 |
| 3. | Medium Farms | 75.00 | 30.00 | 25.00 | 20.00 |
| 4. | Large Farms | 80.00 | 35.00 | 30.00 | 15.00 |
| Total | | 290.00 | 130.00 | 95.00 | 65.00 |

Table 6 : Cropping Intensity before Watershed Project

| SN | Farm Size Groups | No's of Farms | Cultivated Area (ha) | Cropped Area (ha) | Cropping Intensity (%) |
|---------|------------------|---------------|----------------------|-------------------|------------------------|
| 1. | Marginal Farms | 4 | 33.50 | 67.00 | 200.00 |
| 2. | Small Farms | 6 | 58.50 | 118.50 | 202.00 |
| 3. | Medium Farms | 3 | 73.40 | 139.50 | 190.00 |
| 4. | Large Farms | 2 | 79.00 | 145.40 | 184.00 |
| Overall | | 15 | 244.40 | 415.48 | 170.00 |

Table 7 : Cropping Intensity after Watershed Project

| SN | Farm Size Groups | No. of Farms | Cultivated Area (ha) | Cropped Area (ha) | Cropping Intensity (%) |
|---------|------------------|--------------|----------------------|-------------------|------------------------|
| 1. | Marginal Farms | 4 | 33.50 | 75.60 | 228.00 |
| 2. | Small Farms | 6 | 58.50 | 126.80 | 218.00 |
| 3. | Medium Farms | 3 | 73.40 | 158.40 | 216.00 |
| 4. | Large Farms | 2 | 78.70 | 165.30 | 210.00 |
| Overall | | 15 | 288.10 | 605.01 | 201.00 |

CONCLUSIONS

Agriculture is the key sector in India and it engages about 65.00 per cent of the work force, most of which is below poverty line. However, the performance at this sector has been far from satisfactory, during the 1990 agriculture growth in Uttar Pradesh (2.30 per cent annual) was lowest in the country. A large population and poverty have put excessive pressures on natural resources which has led to fragmentation of land holding (less than 0.90 ha). Uttar Pradesh is a major food grain producing state rice and wheat as well as chick pea and pigeon pea area the important food grain crop. Sugarcane is another important food grain crop. So, agricultural economy of Agra district of Uttar Pradesh is based on small and medium enterprises. Main crops of Agra district are wheat, bajra, mustard, potato etc. The district is also suffering from irregular rainfall along with salt water problems. NABARD has sanctioned projects under RIDF act for modernization of the irrigation of state tube wells, construction of roads and works of watershed projects in the district; some of which have been completed and some in various stages of completion.

NABARD is continuing its projects in Agra district under Rural Infrastructure Development Fund (RIDF) and successfully reaching the villages. The study of Bah-Jaithpur Kalan watershed project shows that this project has benefited the villages and the project has changed the cropping intensity of this area. Before the watershed project, overall cropping intensity of selected farm size groups was 170.00 per cent that was extensive but after completion of watershed project cropping intensity reached 201.00 per cent and become intensive. The number of small and marginal farms is more in this area while the large farm size group is less.

So, some plans are being executed for the unfertile or barren land by NABARD through RIDF.

RECOMMENDATIONS

The main recommendations viz.; pucca roads, bridges, dam has increased speed of the movement of agricultural goods, now the farmers are getting their goods in the market at the right time. Some suggestions for the improvement of rural development are as follows:

- After talking to the NABARD officials and administrative officials (state & district), it has come to know that they still lacked the information and cooperation.
- Fund is continuing its projects in Agra district and successfully reaching the villages. So the state government needs to take full advantage of this fund.
- The watershed project undertaken by RIDF has not been properly inspected by the officials after completion. Therefore, project should be continuously inspected so that it works smoothly.
- In view of the lack of resources in the area, more major projects like watershed project are required.
- The government should create a direct connection system for information about the lack of infrastructure of villagers.

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