



## Development Activities and Transformation of Rural Environment in Bhopal Region M.P.

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### ABSTRACT:

Development activities and programs has no doubt transformed the rural environment of our country. Rural transformation is essentially a process of rural development. Rural Development is a process which increase the capacity of rural poor and in turn influences their total environment and initiates the process of transformation of rural areas. Present study analysis the role of various development activities and programs in the transformation of the rural environment of the study region. The region under study represents Bhopal and its adjoining areas under Hujur tehsil. The region is divided into five revenue circles, 225 inhabited and 07 uninhabited villages. Hence using multistage random sampling ten percent villages have been selected for present study. The developmental programs in the region are implemented by district, block level agencies and by the Gram Panchayat of the concern village. Integrated Rural Develop Program, Pradhanmantri Gram Sadak Yojna, Mukhyamantri Gram Sadak Yojna, Mahatma Gandhi National Rural Employment Guarantee Act, Swanajayanti Gram Swarojgar Yojna and Indira Awas Yojna are the some programs which are implemented in the study region, It was found that with the implementation of development programs along with urbanization and industrialization the socio-economic environment, living environment, infrastructure facilities and agriculture environment of the study region has transformed.

**Keywords:** Developmental activities, Rural, Transformation Infrastructure, Agriculture, Land use, Living status.

### I. INTRODUCTION :

India has been considered as a land of villages. There are over six lakhs villages in the country accommodating more than 69 percent of the total population. Generally rural areas are

considered as region of natural scenery with purest form of environment without any pollution. Rural people live with simple way of life and most of their activities are based on agriculture and other allied activities.

As a concept rural development controls overall development of rural areas with a view to improve the quality of life of rural areas. In this sense it is comprehensive and multi-dimensional concept and encompasses the development of agricultural and allied activities, cottage industries and craft, social economic infrastructure and community services. [Singh 1985]

The process of rural development started by the government with the launching of Community Development Program in 1952. Initially goal was to transform traditional rural environment and provide help and support the rural people in improving their income, life style and to give them right to equality and justice.

The activities through which the human energy is constructively utilized in a particular direction with specific objectives for organized advancement in a desired manner is known as development activities. Development activities are multi dimensional and are closely associated with each other where one activity stops another begins. Development activities also refers to programs which are being initiated and implemented under five year plans.

The term transformation can be described as a change in a shape, appearance, quality or nature of something. It is a complicated interplay of shifts towards urbanization, industrial structure, change in the quality of life and change in the proportion of agricultural and other allied activities which provides a key to the overall economic growth while rural environment refers to rural areas. In general rural areas are based on agriculture with purest form of natural environment.

Implementation of various development activities and programs in the region have been



helpful in improving the living standard of the rural people. Effort have been made to provide employment opportunities at minimum wages to the people and access to education, health services and other basic amenities such as housing, electricity, drinking water, sanitation and transport. Rural transformation is a popular field among the scholars. but field based micro level studies are extremely few. The Present research work is based on the field base study of the Bhopal region Madhya Pradesh.

## II. OBJECTIVES OF THE STUDY :

The objectives of the study mainly includes :

1. To study the development activities being implemented in the study region
2. To study the impact of development activities in transforming the natural, economic and social environment of the study region.
3. To study the role of infrastructure development in the transformation of rural activities.
4. To assess the impact of developmental programs in transforming the agricultural environment, and

## III. MATERIAL AND METHODS :

Libraries of various universities, and Government departments have been consulted to study the relevant literature and to collect the required information from books, journals, periodicals, unpublished Ph.D. thesis and reports of various government departments.

## IV. SOURCES OF DATA :

Secondary data and general information related to physiography, population, agriculture, various development schemes and programs have been collected from district gazetteer Bhopal District census hand book Bhopal, district statistical handbook's Bhopal, and annual reports of DRDA / Zila Panchayat and through internet services :

## V. PRIMARY DATA :

As per the requirement and objectives of the study primary data have been collected using village questionnaire and household questionnaire design for the purpose. Data have been collected by interviewing with the selected sample respondents and village level government functionaries of the sample villages.

## VI. SELECTION OF SAMPLE VILLAGES :

Bhopal region under study has 232 revenue villages. It was difficult to cover all the villages in a limited time therefore 23 villages have been selected as sample village by using multistage random sampling method. For this purpose whole study region has been divided in to 8 sectors and 7 circular zones considering the distance and direction from the center. At the first stage 20 percent village were selected and at the second stage finally 23 (10 percent) villages have been selected for the present study.

## VII. SELECTION OF RESPONDENTS:

About 9.85 percent of the total households have been selected as sample households. For this purpose sample villages have been divided in to 3 categories.

- i) Villages with less than 100 households.
- ii) Villages with 100-200 households.
- iii) Villages with more than 200 households.

And than 15 percent household from the first category, 10 percent from the second category and 5 percent from the third category households have been selected for final interview.

## VIII. DATA ANALYSIS :

Simple statistical methods ie. average, mean cross tables were used to data analysis and these data have been presented through tables and using various cartographic methods.

## IX. STUDY REGION :

Bhopal region have been selected as study region. astronomically Bhopal region lies between 23°4' - 23°27' north latitudes and 77°0' - 77°37' east longitudes. The study region is lies on the eastern part of the malva plateau. It covers an area of 1216.3 sq. kms. The name Bhopal is derived from the Bhoj-tal, a lake within the limits of city. Bhopal was the part of Sehore district later on it was made a separate district on 2 October 1972. The region is bounded by the district on the northwest by Vidisha, on the west and south by Sehore, on the south and east by Raisen and on the north west by the Rajgarh district.

The region is can be divided into two physiographic division-

1. The Vindhyan Hill Range
2. The Malwa Plateau

The hill system of the region is formed by the great Vindhyan range and numerous spurs which strike out from the main chain. The average elevation of



the in the south ranges from 1800 to 2000 feet, Singorholi near Lalghati is about 625 meter high and is the highest point in the study region. North of Vindhyan scarps and the hill range lies a large plateau caved with Deccan trap, lava and ash beds from the thickness parts of the series. The average height of the Malwa plateau is 450 meter mostly sloping towards north. The region is drained by Kaliyasot, Halali and Patra river later these river join Betwa river. The region has moderate climate and belongs to subtropical type. The climate of the region is divided in to four seasons, the summer season from March to mid June, rainy season mid June to mid September, autumn season from mid September to November and winter season from December to February. January is the coldest month with average temperature of 18.5 C and may is the hottest month with 44 C. The average rainfall in the region is 1260.2 MM.

The forest of the region are southern subtropical dry deciduous with dry deciduous shrub forest. The species of the trees found in the region include teak, dhaora, salai, saj, mahuwa, semal, haldu and tendu. According to 2011 census region is accommodating 2371061 person while in 2023 Bhopal district population is 3295775 estimated as per adharudai.

Rural Development Programs Implemented under Study Region :

The development programs in the region mainly include-

1. Small Farmers Development Agency (SFDA)
2. Integrated Rural Development Program (IRDP)
3. Jawahar Rajgar Yojna
4. Prime Minister's Rojgar Yojna
5. Rural Sanitation Program
6. Swarna Jayanti Gram Swaraj Yojna
7. Prime Minister Rural Road Scheme
8. National Rural Employment Guarantee Act
10. Pradhanmantri Gramin Sadak Yojna
11. Indira Awas and Pradhanmantri Awas Yojna

## X. RESULT AND DISCUSSION:

### 1. TRANSFORMATION OF INFRASTRUCTURAL FACILITIES :

Infrastructure facilities includes services like transport, communication, education, health, power, banking and administrative setup. These facilities play a vital role in the process of transformation.

Over a period of time the accessibility to the sample villages has improved. In 1981 only 04 villages were connected with metaled road but now with the implementation of Pradhanmantri Gram Sadak Yojna all the 23 sample villages have been connected with metaled roads. Among the sample villages Nipaniyajat and Jhirniya are located on main highway road and people of these villages enjoy a facility of bus service twenty four hours and remaining villages are situated within a distance of 2 to 8 kilometers from main roads. Private transport facilities also improved. About 60.18 percent sample respondent own motor cycles as a means of transport while 37.54 percent using cycles, 6.61 percent respondents using jeep or car as a means of transport. With the launching of various scheme in education field the education facilities of the study region has improved. All sample villages have at least one primary school and 9 villages have a middle school. More than 8 villages avail the medical facilities. Over a period of time communication facilities has also improved. Three sample villages have post office facility while all 23 sample villages are using mobile phones as means of communication.

### 2. TRANSFORMATION OF AGRICULTURAL ENVIRONMENT:

Transformation of agriculture environment refers to change in the shape and forms of agricultural activities by adopting modern inputs, techniques and by reorienting it towards Commercialization.

In last two decades pattern of land use in the study region has witnessed a major change along with the growth of population as well as diversification of other activities.

**Table 1.0: Land use Pattern : 1981-2020**

Landuse	1981	2001	2020
Forest	1420.48	1250.0	1180.6
Fallow land	961.87	1381.0	1285.7
Area Not Avai. for Cultivation	1131.91	1040.0	980.2
Net sown area	7418.74	7262.0	7182.4
Double cropped area	633.0	3701.0	3804.2

Source : Based on village questionnaire



It is clear from the table that the proportion of forest, area not available for cultivation and net sown area has declined due to the increase in non agricultural activities in the study region. Residential colony, malls, schools and colleges are constructed on agricultural land around the Bhopal city while with the increase in irrigational facilities the proportion of double cropped area has increased.

During 1981-2020 forest land decrease by 16.18 percent. Among the sample villages only four villages Amoni, Barkhedi, Abdulla, Garhmurra and Samaspura have forest land while 19 sample villages hardly has any area of forest land. Fallow land increased by 33.6 percent during the period. Total fallow land in 1981 was 961.87 hectare which increased to 1285.7 hectares. Area not available for cultivation also decreased by 13.9 percent.

Net sown area is the most important land use. Total net sown area in the sample villages in 1981 was 7418.74 hectares which decreased to 7182.4 percent recording decline by 3.18 percent.

Double cropped area in the region was only 633.0 hectares in 1981, 3707.0 hectares in 2001 and 3804.2 hectares in 2020 recording growth of 484 percent during 1981-2001 while during 2021-2020 it is 2.78 percent. Land use pattern of the sample villages shows that more than 62 percent of the total gross cropped area lies in Amoni, Barkhedi, Abdulla, Intkhedichhap, Nipaniya, Jat, Parwaliya Sani, Ratanpur, Saistakhedi and Sewaniya Omkar. About 26.30 percent shared by 7 villages and remaining 11.28 percent by six villages.

Cropping pattern of the study region has also transformed. The proportion of food crops, has declined while the proportion of cash crops has increased during the period. In most of the sample villages Maize and Jowar has been replaced by soyabean and sugarcane in varying proportion.

During the period 1981-2020 use of modern agricultural implements has increased. Use of iron plough has increased by 127.23 percent and use of electric pumps increased by 162.82 percent in the study region. Use of HYV seeds, fertilizers and pesticides too has increased.

### 3. TRANSFORMATION OF LIVING ENVIRONMENT :

The level of living in itself is a relative concept and can not be expressed in absolute term. The process of urbanization and industrialization along with the commercialization of agriculture in the study region has affected the quality of the peoples of sample villages, increasing mode of

transport, communication and participation in development activities influenced the living standard and life style of the rural peoples.

In the study region almost 99.64 percent of the total households have their own house and more than 40.1 percent respondents are living in Kuchcha houses followed by pucca and mixed type houses with 38.9 and 21.00 percent respectively. The proportion of pucca houses has gradually increased. People have started investing on their house to improve to enhance the size and add facilities. About 23 percent of the total households have their own drinking water facility and more than 99.26 households are electrified and is mostly used by domestic and irrigation sector. More than 34.06 percent selected respondents are using flush latrines while 8.42 percent respondents use dry toilets. Over a period of time the composition of fuel used also changed. The proportion of LPG user has increased in the study region.

### XI. THE PROBLEMS :

1. Implementation of various development programs as well as selection of beneficiaries is not proper due to the poor co-ordination between functionaries, corruption, local politics and working procedure.
2. During the field work it was noticed that some of the respondents are not aware of development program due to lack of awareness and literacy.
3. Respondents of sample villages are not satisfied with the working of village level government functionaries.
4. Villages with remote location are facing the problem of basic amenities i.e. roads, communication, power, banking and markets.

### XII. CONCLUSION :

Implementation of various rural development programs in the study region have been helpful in improving the infrastructural facilities and living of the people of the study region. During sixth five year plan IRDP introduced in the study region later a number of developmental programs were implemented in the study region. NREGA, SGRY, PMGSY, SGSY, Indira Awas Yojna are successfully implemented in the study region. These programs have been substantially transforming the rural environment of the study region. During the period the socio-economic environment, agricultural environment



,infrastructural facilities and living environment of the sample villages has rapidly transformed.

### XIII. SUGGESTIONS :

1. Identification, shortlisting and selection of beneficiaries have to be made transparent, to overcome the prevailing dissatisfaction.
2. Efforts have to be made by adopting popular modes to give wide publicity of various schemes and programs designed for the betterment of the people and rural areas.
- 3 .Regular monitoring of various development activities have to be made more effective.
4. Public transport have to be provided /as well as their frequency too has to be increased.
5. Better educational facilities to be provided in all sample villages.
6. Efforts are to be made to ensure the medical facilities and established the primary health centers within the radius of 5 kilometers from every villages.

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