



## An evaluation of agricultural development process in rural Madhya Pradesh: A case study of Dikhatpura village in Chambal region (1961-2015)

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### Abstract

The aim of this paper is to look at the role of state in agricultural development and its impact on different social groups at the household and village levels in Dikhatpura Village from 1961 to 2015. The study evaluates the agricultural development plans and programmes of the government from the employment point of view, that how these programmes have assisted the different sections of the society? And who have most benefited from these plans and programmes and how? In order to investigate the answers of these questions, primary and secondary data are used. The primary data were obtained by using the house listing schedules, participant observations, focus group discussions, and individual interviews of all the section of the society by staying around seven months in the village. For the secondary data District Census Handbook, Primary Census Abstract and Village Survey Monographs of Dikhatpura are used.

The study finds that at the beginning, some of the major agricultural developmental programmes and plans, such as Land Reform Act, Canal Construction, Green Revolution, KCCY and MNREGA have played a key role in agriculture development such as, absorbing the surplus agricultural and non-agricultural labours, commercialising agriculture and encouraging the capital accumulation. But in long run all these programmes and plans failed to provide the stable employment opportunities in the village due to lack of institutional and non-institutional supports, such as fragmentation of land, extensive use of agricultural technologies, growing cost of cultivation, changing consumption pattern, higher growth rate of population, rampant corruption, caste and wage discriminations and so on. Likewise all these factors limit the scope of employment in the agriculture sector.

**Keywords:** agricultural development, employment, development plans and programmes, social groups and labour process

### Introduction: Literature Review

Some well-known village studies carried out by sociologists and anthropologists to understand the nature of agrarian change over period a time. A multi-caste village in Tamil Nadu was resurveyed by Harris (2012) in 2008 to investigate the relations and changes among land, labour and caste politics since 1916. He finds that despite the 'green revolution' and diversification of employment, still a majority of households were dependent on agriculture because of heavy pressure of population on land and smaller size of landholdings and agriculture remains stagnant particularly after the 1970s. The village landlord exercises power but in different forms than earlier. As Dalits now are free to enter into the village by wearing the footwear his authority is no longer absolute, and he can no longer command village labour as he once did. It is still the case that he can pay lower wages than anyone else, or to secure extra hours of work for the same rate as that paid by others. And he still has a significant influence on village politics. But the Dalit social movement, education and political mobilization have brought a social empowerment among the Dalits which led to significant changes in tightening the labour market and historic shift in agricultural wage rates. However, Harris' study is not placed in the context of the growth of agricultural surplus and its use in different sectors.

The similar study was carried out by anthropologist Breman (1974) <sup>[1]</sup> in two multi-caste villages of South Gujarat. He sees

a drastic transformation in cropping pattern in study villages after Green Revolution, introduction of electricity, use of new methods of production (like modern irrigation: well, oil pumps, canals and so on) and credit facility which encouraged farmers to cultivate less risky and more profitable cash crops like *chiku*, chilly, and rice. But the development of agriculture could not reach up to the weaker sections or lower caste groups like *Kolis* and *Dhobis* because these castes rarely qualify for any credit granted by the government. The dominant castes gained disproportionately from development policies and programmes. However, Breman does not take a holistic view of rural change which arises from different internal and external forces like education, migration, industrialisation, demographic transformation and urbanisation.

Himanshu, Joshi and Lanjouw (2016) <sup>[16]</sup> in their study of village *Palanpur* (UP) note a considerable socio-economic transformation in the village in the last seven decades. Major changes in agriculture occurred till 1989 (including land reform and green revolution) through mutual interaction among different factors, such as demographic changes, expansion of irrigation, intensification of cultivation, changing cropping pattern, farm mechanization, growing non-farm employment, "marketization" of factors of production, and improvements in formal credit supply. While earlier agriculture and limited outside jobs were the major sources of income, after 1980s non-farm jobs and outside jobs have become critical. Agricultural labour households are no longer

dependent on agriculture as they have found a major opportunity in construction sector in nearby towns. Likewise, along with growth of income, inequality has also increased considerably among different social groups. The lower castes (particularly *Jatavs*) still remain at the bottom in the socio-economic ladder. However, the authors do not consider the process of growth of agricultural surplus and its uses.

Sharma and Rodgers (2015) <sup>[11]</sup> studied longitudinal household data (of three time points of 1981, 1998-99 and 2009) of a sample village in Bihar in order to explore the structural changes in the rural economy and production relations among different social groups. This study notes significant changes in class structure and mode of production after the 1980s. Before the 80s the rural economy of Bihar was dominated by big peasants/landlords (in nature it was a semi-feudal economy), but after that, there has been a great decline of big peasants accompanied by casualisation of attached labourers and their outmigration. At the same time, the number of marginal farmers and landless households has increased sharply across communities (including *Bhumihars*, *Yadawas*, Muslims, and *Mushars*). The highest numbers (more than 90 percent) of landless households are found among schedule castes particularly, in *Mushara* community. There is now greater inequality in the distribution of property among all social groups. Due to fragmentation of landholdings for most of the smaller peasants agriculture has become a secondary occupation or source of income. The local labour market has become more female labour-intensive with worse terms and conditions.

Sbriccoli (2016) <sup>[10]</sup> is a re-survey of Jamgod village in Dewas district of Madhya Pradesh (which was first studied by British anthropologist Adrian C Mayer in the 1950s). It seeks to explore the transformation of local power structures and personal aspirations. The village has gone through a change in the power structure. Castes like *Ahir*, *Khati* and even the *Chamars* have become politically more mobilised in comparison to *Rajputs*. The local power structure is no longer strongly associated with land. The structure of the labour market became more complex. Jamgod's development is industrially motivated. Jodhka (2014) <sup>[7]</sup> resurveyed two multi-caste villages of Haryana after 20 years, in 2008-09 to understand the nature of agrarian change and village life particularly after Green Revolution. With Green Revolution and growth of large industries, significant changes are observed in the socio-economic life of the village. Large farmers are the one who reaped benefits from these policies. The *Jats* became dominant in local as well as regional politics. Dalits are less dependent on agriculture for livelihood as some of them are employed in public sector. The urban effect is also reflected in the present -day lifestyle.

Chaubey (2006) <sup>[5]</sup> found that in his comparative study of Madhya Pradesh and Bihar, though lower caste-class got the opportunity to become *Sarpanch* but the actual power is still in the hands of upper castes/Rajputs. The similar result found by Gupta (2005). His study reveals that during the various periods of Congress rule in Madhya Pradesh there never was any dearth of efforts by the state for the inclusion of the marginalised in the power structure. The emergence of the subaltern remained confined within the parameters of upper caste-class dominance. As a result, it failed to trigger social

movements among the backward caste-classes, as in Uttar Pradesh and Bihar. The another important thing is that in Madhya Pradesh Land Cultivation Act, 1960, Land Cultivation Act, 1974, and Consolidation of Holding Rules, 1959 have not been decisively implemented. This has resulted in a continued hold of the forward caste the Thakurs and Brahmins together with few other castes like *Yadawas* and *Gujars* controlling a large share of land.

There is no denying that the various studies revealed here have yielded valuable insights into the rural economy and society across regions of India. In fact, several of these results hold good for our study of Dikhatpura (Madhya Pradesh) as well. However, these studies vary widely in their scope, objective and disciplinary perspective. They do not share our comprehensive framework of commercialisation integrating the elements of space (rural-urban), economic sectors (agriculture-non-agriculture), the state of development of agrarian markets (in labour, land, credit etc.), accumulation of surplus, and social classes (including caste groups), as outlined above. Nor do they always have the advantage of the possibility of a longitudinal study based on bench mark surveys in the distant past.

### Methodology

The village is selected on the basis of two village survey monographs which were published by the Office of Registrar General based on 1961 and 1981 population censuses. One was published in 1964 and another one in 1988.

The field surveys were conducted in two phases: from September to October 2013 and February to June 2014 by settling in the village. Around seven months were spent in collecting the primary data from Dikhatpura. Apart from Dikhatpura four other neighbouring villages also surveyed as pilot survey to know the basic features of these villages and region to make this study more relevant and authentic. Besides this, around three months had been spent in collecting the secondary data from different departments of the state. So a sum of around ten months were spent in the fieldwork itself. Before conducting the main survey, the pilot study was conducted in the *Kharif* season in the month of September to October and the main filed survey was conducted from February to June 2014. A brief profile of village as follows:

**Table 1:** Caste-wise number of households in Dikhatpura village, 2014

Caste/Category	HHS	Persons	% to Total Population	Size of HH	Average Land Per HH (in Ha.)
Brahmin/GEN	11	65	7.39	6	4.27
Kumhar/OBS	10	70	7.96	7	1.33
Gujar/OBC	47	323	36.75	7	5.16
Jatav/SC	87	421	47.90	5	0.16
Total	155	879	100	6	2.73

*Source:* Filed Survey

Apart from Dikhatpura, other four multi-castes neighbouring villages also had been surveyed during the main field work as a pilot study to take the overview of labour and accumulation process in the respective region-

Despite collection of basic information of household level many information left at village level and household level also. Which were covered through case study, intensive focus group discussion, and participant observation with different social groups, local labours, migrant labours and old people (including male and female), businessmen, tractor and thresher owners, government and private servants, teachers. Apart from it, I participated in different kinds of social, economic, political and cultural activities (like marriages, funerals, birth day party, festivals, political gathering and so on), not only at villages level but the regional level also. This helped me to understand the village and regional characteristics of the economy and other sensitive issues like caste based, political based and corruption based and so on in details.

In this study, both types of data are used: primary and secondary. The primary data were obtained via the house listing schedules, participant observation, focus group discussion, and individual interviews with all the section of the society as it is already discussed above. For the secondary data District Census Handbook, Primary Census Abstract, Tables of Agricultural Statistics, published/unpublished books/thesis/articles, are followed. Apart from these, Village Survey Monographs published by Registrar General are used to get household level data of Dikhatpura. In order to analyse the data various statistical tools are used such as average, percentage, comparative, explorative and descriptive methods are used.

### **An Overview of the Role of State**

The rural economy of India has experienced several challenges throughout its socio-economic and political history. After a long struggle in 1947, India achieved independence and emerged as one of the largest democratic countries in the world with number of challenges. Till 1947 the rural economy of India had become completely vulnerable due to *Zamindari*, *Ryotwari*, and *Mahalwari* revenue settlements. The rural India was suffering from extreme poverty, hunger, unemployment, illiteracy, low agricultural production, extreme caste discrimination and so on. Likewise, there were several challenges before the central and state governments. There was an urgent need to give the assistances to millions of people who were dying of poverty and hunger. In order to short out these issues and encourage all the sectors through five year plans the planning commission was established in 1950s through the recommendation of J.C Kumarappa committee.

However, at that time there was also a huge deficit of government funds to pump the money on public sector in order to implement the new developmental and employment oriented programmes. In those days the employment opportunities were very less in rural areas and agricultural sector did not have capacity to absorb a large number of labour for a long time due to lack of irrigation facility and age old Zamindari system. A massive population was landless and working under the control of Zamindari system because they did not have own sources of livelihood. In 1950s the Congress govt. took a decision to implement a land reform policy in agricultural sector in order to reduce the poverty and socio-economic inequalities among different social groups in the

rural areas. This initiative met with limited success across the country due to several factors; except in two states with more effective implementation, namely: West Bengal and Kerala. But the partial implementation can be seen in some part of Madhya Pradesh particularly in Bundelkhand, Malwa and Grid regions. In these regions about 15 districts were brought under the land reform law including Morena district. In this district land reform act had brought a significant socio and economic transformation particularly in Dikhatpura village. In 1951, the land reform law was implemented effectively in this village because of that all the households of this village had become the owner of some pieces of land. It was a first phase of structural change in agriculture of this village.

After 1950s through five year plans government gave the priority to different sectors according to the budget. In the first and third five-year plans government focussed on agricultural sector in order to bring the food security, because in those days the country had been facing food crisis. It was importing the food grains from the other countries to supply the food to the poor people. Because at that time the demand of food was very high due to higher growth of population and lower production of food grains. To short out this problem during 1960s (during third five year plan) government established several agricultural universities, cooperative societies, and banks. Moreover, it focussed on irrigation projects to encourage the agricultural productions. However, in mid-1960s the green revolution came with as an important phase of agricultural revolution which can be seen as a second phase of structural transformation in agriculture because it had played a significant role in bringing the technological transformation in the agriculture sector which further led to socio-economic, political and cultural changes in the rural society.

The effect of green revolution has been seen in Dikhatpura village also particularly in this period. Because in 1966 a canal had been constructed up to the village and across the region, people were using canal water and they had also started using the agricultural technologies like tractors, threshers, HYV seeds, fertilizers, and pesticides due to irrigation facility. Likewise from 1951 to 2014 several developmental programmes have been implemented by the state and central governments but the impact of these programmes appear negligible due to local politics, extreme social and caste discriminations, inefficiency of *Sarpanch*, lack of awareness about government schemes and extreme corruption.

Despite existence of several issues in the villages these developmental policies and programmes have changed the structure of rural employment considerably. The reflection of these developmental programmes can also be seen on degree of agricultural commercialisation, accumulation process and socio-economic, political and cultural life of Dikhatpura village and Chambal region.

### **Land Reform**

The village was a Zamindari village till 1951. Consequent to the abolition of the *Zamindari* system the whole set of conditions underwent a rapid change in Dikhatpura and respective region. In the older time the proprietors of land were the *Zamindars*. Land then, for the first, moved over to the tiller, as a result of this the *Jatavs* who had been sub-tenants of erstwhile Brahmins and *Gujars*, became *pakka*

tenants and benefited the most. This also accounts for their giving up tanning. After the land reform one would have thought that this measure of land would satisfy them to ensure continuance of their tenancy. But when it was asked about the change to a person he admitted that today land is ours but yester years were better and the *Zamindar* was more benign ruler. To him *Zamindari* seemed to typify a benevolent personal autocratic rule. Here was one person upon whom he could fall back for more land for money and any other help. This was always forthcoming. Thus with such aid, life to him appeared rosier, but today he woefully complained. "None is prepared to hear you" *Koi tumhari sunne wala nahi hai*". "If you want land the *patwari* misguide you, if you want loans it is never given in time and the tehsil clerk sees to it that you go through the maximum discomfiture". He complained that with rise of prices, he remained where he was. In praise of the *Zamindar* he said that the latter, if needed we also protected him. Today he moans you are at mercy of lawless elements. This is a far off cry from one used to pampering, perhaps: it is the initial difficulty in adopting oneself to a situation in which one has to be self-reliant. Yet this serves to emphasise the fact that even a universally condemned system may have its redeeming features.

Others admitted to the benefit that had accrued to them. Among other things they were happy at the fact that they had become the owner of lands. And the rent recovered from them was less and uniformly spread over. This had enabled them to cultivate better. They were no longer required to dance attendance on the whims of the *Zamindars*. No *begar* was taken from them. During the days of *Zamindar* they were deprived of the right of becoming a *pakka* tenant of the land by malicious allotment of lands. It was the law then, that if a cultivator had been in possession of land continuously for 12 years, he was entitled to be declared as *pakka* tenant signifying that the land would be heritable and transferable. The *Zamindars* saw to it that no one succeeded, thus he leased in such a way that none could claim the advantage through continuous possession.

**Table 2:** Caste-wise Per Household Land Distribution in Dikhatpura Village, 1961 and 2014

Castes	1961			2014		
	Total No. of HHS With Land	Total Land (Hectares)	Ave. Land Per HH (Hectares)	Total No. of HHS Without Land	Total Land Distributed (Hectares)	Ave. Land Per HH (Hectares)
Brahmin	3	17.81	5.94	—	—	—
Gujar	15	70.01	4.67	—	—	—
Jatav	45	81.74	1.82	5	—	—
Kumhar	5	8.62	1.72	—	—	—
Total	63	178.18	2.83	5	—	—
Brahmin	11	47	4.27	—	—	—
Gujar	47	242.33	5.16	—	—	—
Jatav	87	54.33	0.62	24	16	0.67
Kumhar	10	13.33	1.33	—	—	—
Total	131	356.99	2.73	24	16	0.67

**Source:** Village Survey Monograph of Dikhatpura Village, 1981, p. 70. Field Survey, 2014.

As Table 2 presents that in 1961, all social groups had some

pieces of lands except 5 households of *Jatav* community. Because the land distribution had been taken place around 10 years before (in 1951) of first (1961) survey. At that time all the households from each community had benefited from Land Abolition Act. However, due to prior burden of debt some of them had sold out the land to the moneylenders, from whom they had borrowed the money for food and other social and economic expenditures. And some land had been illegally snatched away by these moneylenders from them due to failure of not returning the money back in time. In those days moneylenders used to be *Gujars* because earlier they were the landlords. They used to charge high rates of interest. There were two moneylenders with 44 families in their clutches, the rate of interest was quite high. Once debt had been obtained it was hard to liquidate it. There was a case where the father borrowed some money and the son was slaving for it. The villagers knew fully well that the tentacles of the moneylender octopus are unrelenting. Once in his clutches it is almost impossible to come back to normal life. The moneylenders' willingness to loan money at the weakest moments of the lives of the tenantry was his biggest weapon to hold them. Whereas a service society or govt. would fail a cultivator or not come to his timely rescue, the smiling, innocuous but vicious moneylender would promptly come to their aid. When the repayment of a loan was delayed, various tactics were resorted to. It started by constant pressure, cajoling and end up by getting the debtor beaten up. Sometimes the debtors pledge to work for the creditor to wipe out the debts. It was to one such case that the allusion referred to earlier relates. Everybody used to maintain good relation with the creditor, and they had to.

Table 2 shows that in 1961 the average size of landholdings in Brahmin community was larger (about 5.96 hectare per households) than other communities because in this community the number of households were less. And other important thing is that they were the *Zamindar* of this village, as already mentioned in previous chapters. But in 2014 the average size of landholdings had decreased in this community from 5.96 hectares per household to 4.27 hectares per household due to increment in households. If we compare with 1961 the total amount of land had increased in this community from 17.81 hectares to 47 hectares. Because in this long period some of the households from this community purchased the land from *Jatav* and other weaker communities particularly those who had government jobs and income from various sources like transport, dairy and agriculture.

Similarly, *Gujars* also acquired lands through legal and illegal ways, from those who were not able to clear the debt. These moneylenders (*Gujars*) snatched away lands from them particularly *Jatavs*. And some of the land they had purchased legally as we can see in Table 2 in 1961, the per household average land was 4.67 hectares which had increased up to 5.16 hectares per household despite huge increment in number of households. In this period, particularly *Kansana* family, had purchased a considerable amount of land because this family had income from many sources like transport, industry, agriculture, politics etc. Likewise, this family had accumulated the economic and political powers.

The case of *Jatavs* is quite different because since beginning they were the social service doer but due to land abolition law

they had become the sub-tenants to actual tenants and owner of the land because of that their life has transformed rapidly. Actual land ownership reduced their economic dependency on others and gave them social and economic securities to live a decent life in the society. Agricultural occupation not only gave them socio and economic securities but it directly and indirectly also helped them to choose the better employment opportunity with the help of agricultural income. From this community, from 1961 to 2014 most of the people got government and private jobs and settled down in cities, because of that the quality of life of these people has changed drastically. However, those who have neither land nor any other job their economic and social conditions are still quite vulnerable. In 1961 there were around 5 landless households in the village. They had sold off their lands to clear their debt since they had very little land and big family size; likewise, the number of landless households went on increasing. In 2014 there were nearly 24 landless households reported in the village. These households had been living without any agricultural land for the many years. Around 15 years ago the *patta* had been given to these landless households when the congress government was in power in the state but the land was distributed in 2013-14. However, those lands were not suitable for cultivation, as the lands given were uneven, barren and unfertile and far away from the canal. The *patta* had been given to the needy and poorest people including widows. Most of the *pattadars* sold out their lands to the *Gujars* and Brahmins because they themselves did not have money to make them cultivable; they got little benefit by selling them. Likewise, *Kumhars* also benefited from the Land Abolition Act., They also had become sub-tenant to actual tenant in 1951. In 1961 the average land was 1.72 hectares per household in this community which had decreased to 1.33 hectares per household due to rapid increment in number of households. But the economic condition of this community was little better than the *Jatav* community. If we compare the total amount of land to 1961 there has been an increment from 8.62 hectares to 13.33 hectares. Because there are few people in this community who had purchased land since they had income from government jobs, dairy and agriculture. This can be seen as a big achievement for this community. From this community nobody had sold the land till 2014. So here we can say that the land reform law has played a vital role to make poor sections economically, socially and educationally better off in the village and encouraged the degree of commercialisation in agriculture sector. Apart from it, it also directly and indirectly created the employment opportunities for all kinds of farmers (small to big) in the village. The similar change has been observed in neighbouring villages as these were also Zamindari villages.

### Green Revolution Canal Construction

Like the 'Land Abolition Law', in mid-1960s the introduction of canal irrigation facility also brought a drastic structural change in the agriculture sector of Chambal region of Madhya Pradesh particularly in Bhind, Morena and Sheopur districts. Before introduction of canal the agriculture pattern in Chambal region was rather distressing. Although, per capita holdings were bigger than rest of India and soil was fertile,

rainfall ample, Despite, per acre crop yield was rather poor. The general standard of cultivation was low. The seed rate was 40-50 seers of wheat per acre (double of the Punjab) but the recovery was only 4-5 mounds. The yield of other crops were, likewise low i.e. cotton about 2 mounds per acre under dry condition, maize 6-8 mounds (unirrigated) and 12-14 mounds (irrigated); only 800 hectares area devoted to sugarcane in Kotah and Bundi District (Rajasthan) and cotton occupied hardly one percent of the total area. The condition of Bhind and Morena Districts of Madhya Pradesh coming under Chambal Project appeared to be no better than that in Rajasthan except to few progressive farmers.

However, the canal originates from Kotah Barrage Dam which is located in Rajasthan of Kotah district over Chambal River; constructed during 1960s. The water of this dam releases 50 percent of its excess to the neighbouring areas of Madhya Pradesh for enhancement of agricultural productivity. The right and the left canal of Kota Barrage releases water to accommodate the neighbouring agricultural fields of greater Rajasthan and Madhya Pradesh. Presently more than 11,322 acres of land is being irrigated in the area of Madhya Pradesh alone.

When we look at the situation of Dikhatpura village as it is already mentioned in previous chapters until 1961 there was no irrigation facility in the village neither from canal nor from other sources. The farmers were completely dependent on monsoon generally in the Rabi season—most of lands were left empty for the cultivation of Rabi crops in order to maintain the moisture in the soil for the Rabi crops.

**Table 3:** Percent Distribution of Irrigated area through canal in Dikhatpura Village, 1941-2014

Year	Total Geographical Area (Hectares)	Total Cultivated Land (Hactares)	% to Total Area	Actual Irrigated Area (Hactares)	% to Total Area
1941	315	268	85.08	0	0.00
1951	315	268	85.08	0	0.00
1961	315	268	85.08	0	0.00
1971	315	244	77.46	41	16.80
1981	315	244	77.46	189	77.46
1991	315	244	77.46	224	91.80
2001	315	244	77.46	258	105.74
2011	315	244	77.46	270	110.66
2014	315	244	77.46	274	112.30

**Source:** Village Survey Monograph of Dikhatpura Village, 1981, p. 66.

District Census Handbook of Dikhatpura Village, 1991, p. 170-71.

District Census Handbook, 2001.

Primary Census Abstract, 2001.

Field Survey, 2014.

As soon as the season would get over the Rabi crops were sown in the empty fields. If we look at the percentage distribution of irrigated area decade-wise the irrigated area has increased rapidly after 1971 because the canal water was released up to the village in 1966. From 1966 to 1971 out of 244 hectares nearly 16.80 percent area had been brought up under the canal irrigation by the farmers.

However, in those days most of the farmers were poor they

did not have money to buy the diesel engines to irrigate all the lands which were located far away from the canal. But gradually farmers went on buying the diesel engines to irrigate the lands particularly those who had more acres of land. Poor farmers also started irrigating their lands by hiring the diesel engines from the big farmers. Likewise, until 1981 the percentage of actual irrigated area increased up to 77.46 percent, it was a drastic increment as compared to all the periods. But after 1981 onwards there had been a gradual increment as you can see in Table 3 till 1991 it was increased to 91.80 percent, again in 2001 nearly 105.74 percent area was brought under irrigation system. But from 2001 to 2011 there was a little increment. The reason for slow growth rate of irrigation area is there was no plain area left without irrigation because the land which was plain and cultivable had already been brought under irrigation system. Only barren lands were left unirrigated particularly which were given to the poor people to cultivate. Those lands were highly uneven, barren and quite far from the canal therefore the total irrigated area could not exceed more than 112.30 percent of total cultivated area in the village.

In Dikhatpura as well as in respective region the canal irrigation has played a vital role in changing the structure of land, employment pattern, size of the family, consumption pattern, adoption of new agricultural technology and so on. After introduction of canal, farmers became more progressive. In order to achieve their certain goal of agricultural production they started adopting new agricultural technology like tractors, threshers, HYV seeds, fertilisers and pesticides. They also changed the cropping pattern from food crops to non-food crops, multi cropping to mono cropping pattern, subsistence to surplus, likewise, there have been huge structural changes in all the aspects of agrarian structures.

### Impact of Green Revolution

After the canal introduction green revolution also brought a tremendous transformation in the cropping pattern and employment opportunities. In the beginning only few states (like Punjab, Haryana and Western Uttar Pradesh) had been brought under the green revolution by providing the special package for the essential inputs like credits, HYV seeds, pesticides, insecticides, irrigation and so on. As the Morena district is located in the extreme northern part of Madhya Pradesh and surrounded by some of the districts of Rajasthan and Western UP. The reflection of green revolution has been seen in the whole Chambal division/region due to its geographical location. As one of the major inputs of green revolution was irrigation which was already facilitated through canal system in the Chambal region. Also, due to being a neighbouring district of Rajasthan and UP the knowledge of technology adoption had spread over across the Chambal region particularly in irrigated areas.

The impact of green revolution had been seen in Dikhatpura village also after the introduction of canal, as the village is also located at the bank of Chambal valley which is quite nearby western UP. However, in 1966 the canal water had been released from the Kotah Barrage Dam in order to supply the water for the irrigation across three districts of Madhya Pradesh such as Sheopur, Bhind and Morena in which Dikhatpura and surrounding villages also benefited. In those

days generally people were involved in agricultural activities with the help of bullocks and man power. But gradually all the bullock driven carts and ploughs disappeared after introduction of the tractors and threshers in the village and across the region. Initially, all the farmers (including small and marginal) got huge advantage from green revolution because at that time the cost of inputs was quite less and the production was more. Because of agricultural surplus the animal husbandry also had become the major source of an additional income for almost all the farmer households. Those who had more lands and more milch cattle and other sources of income invested their surplus income on tractors, threshers and other agricultural tools in order to short out the shortage of agricultural labourer and cost of cultivation. As, it is already referred in previous chapters. At that time almost all the households used to have some land. Generally big farmers would experience labour shortage in peak seasons like sowing and harvesting.

It is observed that in Dikhatpura and surrounding villages very less work is done by the manpower such as partially sowing and reaping otherwise almost all the agricultural activities are done with the help of different kinds of agricultural tools. Because of that the cost of cultivation has been increasing. Those who have little land like 1 acre or less than that they are in great distress because of that they cannot migrate, they take the land on lease, and sometimes work as casual labourers on others fields. They face credit problems, they also cannot always hire the agricultural machineries for minor works. Likewise, they are not able to come out of these circumstances.

However, due to intensive use of tractors, pesticides, insecticides and fertilizers the fertility of land has decreased drastically, the input-output ratio has widened sharply, the unemployment rate has increased and the economic inequality has also increased among different social groups over time.

### Self-sufficiency in Food Security

Before green revolution and introduction of canal a great food shortage was there in the village mainly in *Jatav* community. Because at the time *Jatavs* were not the actual owner of the land they were working as sub-tenants. After 'Land Abolition Law' most of the tenants became actual owner of the land but over burden of debt and food scarcity compelled them to sell their land. Most of the poor households kept on selling their land to the *Gujars* particularly moneylenders from whom they would borrow the money. But after introduction of green revolution most of the people became self-dependent in case of food security. They started cultivating wheat, mustard, *bajra*, and *jowar* in larger area by adopting high yielding variety (HYV) seeds, fertilizers, pesticides and so on.

However, all the farmers became completely dependent on HYV seeds, fertilizers and agricultural tools in order to get more yield and become economically prosperous. But in case of the *Gujars* and Brahmins they were prosperous since the beginning, as they were the *Zamindars*, and had become economically more prosperous after green revolution and started constructing large houses, purchasing agricultural tools and keeping more milch cattle. Whereas the economic condition of the *Kumhars* was not that much good but due to domestic industry (earthen pot) they were able to manage their

life so they did not sell their land like *Jatavs*.

### **Brief Overview of Regional Agriculture**

In order to get an overview about the situation of regional agriculture I visited to the Rural Agricultural Development and Soil Testing Office (on 19/09/2013) where I met some of the agricultural staffs and discussed about the developmental issues at regional level. An agricultural officer told that mustard and *bajra* are the major cultivating crops in Morena district. Particularly Morena district is known for mustard cultivation it has mustard research centre there are some of the high yielding varieties of mustard which give per hectare more yield like *Kirti*, *Jyoti*, *Vesally*, *Vaibhav*, *Varuna* and so on. Apart from him ADO Mukesh Kumar Sakya reported that in terms of irrigation Morena stands in the fourth rank in Madhya Pradesh and further he said that Morena has biggest *galla mandi* (Krishi Upaj Mandi) in Chambal region.

After visiting to the Rural Agricultural Development and Soil Testing Office I visited a milk factory to know the expansion of milk market and its products. Where I came across a dairy staff I asked him about the expansion of the dairy market, he told that they do not make anything except cheese (paneer) and milk powder, they sell out these milk product in different cities like Delhi, Sagar, Gwalior, Bhopal, and nearby cities and in marriage ceremonies etc. Moreover, he told that there are so many milk collection centres and dairies in the city. After discussing with him I met some of the dairy workers those who were working there I asked about their daily wage rate—they said that they are paid 200 rupees per day but those who have working experience they receive more wages as compared to new workers. One of the clerks of that dairy reported the situation about trend and yielding of milk. He spoke that, September to February milk production happens more than other periods because, in these months cattle give more milk due to favourable climate and availability of green fodders whereas March to August is considered as a lean season, during this period milk production is lowered due to hot climate and lack of availability of green fodders.

On the same day I visited one of the mustard oil mills where mustard oil is produced. There I came across two middle aged workers I asked them about the export of mustard oil they spoke that the oil is exported across the country like to Assam, Bihar, Andhra Pradesh, and Punjab and on. The size of Mustard mill was large and most of the work was done by machines. The workers told that the mill produces 12-15 tons of oil every day. The by-product like oil cakes (Khali) also is sold out at the Rs. 1600 per quintal. They were paid 200 rupees per day whereas the experienced workers were paid more wages as compared to new workers.

Here we can say that the green revolution has played a vital role in enhancing the degree of commercialisation of agricultural produce and providing the employment opportunity to the rural labour in non-farm sector. In Morena there are several oil plants and milk dairies that have been established after the green revolution (for more detail look at the chapter 2) which directly and indirectly encouraged to the mustard and milk productions across the region.

### **Programmes**

**Kisan Credit Card (KCC)**-To encourage the agriculture

sector the credit card scheme had been launched by the central government in 1985-86 to give the assistance to the farmers for the agricultural activities. But the advantage of this scheme could not reach up to the poor farmers due to its complex process, lack of awareness and corruption. Generally bank clerks/mediators never grant the loans without taking the bribe. They take the bribe from the borrowers before granting the loan and after granting also. Hence due to this reason poor farmers do not prefer to go to the banks to borrow the money. Generally, big farmers take the advantage of KCCY particularly those who have knowledge about it and good relation with the bank clerks and other mediators. In Dikhatpura there were 16 farmers who had the *Kisan Credit Cards* excluding *Jatavs* and *Kumhars* because they have very less land therefore the requirement of credit is less as compared to big farmers. But due to complex process of it they never borrow the money from the banks, they are completely dependent on local moneylenders for small and major borrowings. As, it is already mentioned in previous chapter. But in case of big farmers like Brahmins and *Gujars* they take the advantage of KCCY because they always need more money to invest on agricultural activities and agricultural tools like tractors, threshers and so on. That is why they borrow the money from the banks according to their need.

### **Agricultural cooperative society**

There is an agricultural cooperative society which was established in 1925 in Dikhatpura but now it runs in different village in the name of Dikhatpura. It was earlier in Dikhatpura but few years ago it has been shifted to neighbouring village. Very few farmers borrow the money from this society because this society is located around 10 kilometres away from Dikhatpura village and it does not provide the credit, seeds and fertilizers timely. Due to these reasons farmers do not prefer to borrow loans and other inputs from there. Most of the farmers borrow money from their friends, relatives, milkmen and so on. Some of the big farmers borrow from the banks and very few farmers borrow money from the *Sahukars* by mortgaging their jewellerys. There are no formal *Sahukars*, *Mahajans* and landlords who can provide the loans at any time in the village.

But there are 6-7 milkmen in the village who provide the direct loans to the farmers particularly those who sell the milk to them. If any person wants to purchase buffaloes they give Rs. 20-30 thousand to him for purchasing the buffalo and sometimes more than that according to the social and economic relations with him. Borrower clears this loan by selling off the milk to the same milkman at lower (2-3 rupees) price than prevailing rate. Because milkman lends the money without interest. In general milkmen do marketing for the borrowers in case borrowers do not go to the market. They buy the oil cake, flour, oil and jaggery, because these things are given to the cattle every day in order to increase the yield of milk. Sometimes milkmen buy salt and chilly also for the farmers. But for all these things they charge the extra money. Milkmen themselves milk the milk from the buffaloes because they do not believe in buffalo owners. In the village they buy the milk at Rs. 8-10 per litre less than market price. Farmers also compelled to sell it at the lower price because for them it

is difficult to go to market every day since milk production happens very less and market is too far. If they go to the market to sell the milk they lose time and wage both. In other words they would be in loss hence they prefer to sell the milk in the village itself. Milkmen are very clever they mix water, washing powder and dalda in the milk in order to make more money. Till late night they purchase milk and milk the buffaloes. Likewise, early morning they started purchasing or collecting and milking. Since there are many milkmen and they have pre-fixed houses from those houses only they collect the milk.

It is reported that by many people, generally people borrow money from the friends, relatives, in-laws house and so on. In general people lend money on the basis of previous experience of a persons if he is credible he may get money even without any interest for a few days if he is a defaulter he may not get even with higher interest. In general dignified people borrow money secretly and repay it timely without disclosing anyone. But in case of defaulters or those who delay up to a long time. He/she suffers in difficult time, he roams here and there in order to borrow the money but nobody lends him since most of the villagers and relatives know his attitude/tendency. Those who have already suffered by lending him money they make others also aware not to lend him money in any situation. There are a few people in the village who borrow the money from the people but do not return it back in time in this circumstances quarrel takes place in between borrowers and moneylenders because these borrowers keep on postponing the date to return the money.

#### **Developmental Works under MGNREGA**

After establishment of planning commission, several efforts have been made by the government to reduce the rural poverty and economic inequalities by providing the employments through different plans and programs. For example—in 2006 the MGNREGA had been implemented in India, which is also considered as one of the largest rural development programmes in the world. However, this programme initiated with the objective of enhancing livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult member is volunteer to do unskilled manual work. Under MNRGA several works are done such as road construction, pond construction, and well construction and so on. But the success of this programme varies state to states even village to village.

In Madhya Pradesh this programme has played a vital role in enhancing the social and economic securities for poor households. But in some areas of Madhya Pradesh this programme could not function properly due to rampant corruption, social discrimination, caste politics, delay of payment, lesser wage rate and so on. In Dikhatpura village under this programme very few works are done since the implementation of this programme. Basically this village is dominated by caste politics because of that the development works are done on the basis of caste, relatives, social relation and so on. As, it is already mentioned in previous chapter. Historically the whole village is inhabited on the basis of caste line, there are four localities in this village for the each social group. Because of this village structure every locality dwellers

cannot avail the benefits of durable public assets collectively. One may understand through this fact...in Dikhatpura, in the last 10 years 1 road, 1 Anganwadi, and 1 drainage are constructed only in the locality of Gujar in the same locality 5 hand pumps are installed. Apart from these three cattle shades are constructed under MGNREGA they also belong to the Gujars. There are only 2 households of Jatavs which have benefited from the Indira Awas Yojna because the benefit of this yojna only the BPL household could take. It is reported by many people that for all the works the bribe had been taken by the Sarpanch around 20-25 percent of the total amount. Without bribe nobody had got the benefit of these programmes and schemes.

#### **Conclusion**

The above analysis shows that since establishment of planning commission several developmental programmes have been implemented in the state by the state and central governments in order to encourage the rural economy and minimize the gap between rural and urban life. However, up to some extent India could able to achieve its goal through five-year plans and other developmental programmes and acts. But due to lack of proper supervision and proper assessment of these programmes led to rampant corruption at the village and regional levels. Apart from these, caste politics and caste system have also damaged the whole objectives of the five years plans up to larger extent. Despite it there are some of the major developmental programmes which have played an effective role to absorb the surplus agricultural and non-agricultural labourers in the village such as Land Abolition Act, Green Revolution, and MGNREGA and so on. But in long run all these programmes failed in providing the employment opportunities in the village due to fragmentation of land, expensive use of agricultural technology, growing cost of cultivation, lack of technical education and so on. Likewise, all these factors limit the scope of employment in the agriculture and government sector. But in the beginning all the programmes absorbed the surplus labour in the village and encouraged the commercialisation in agriculture and accumulation process but again due to lack of institutional and non-institutional support these programmes failed to provide the employment to the villagers. Even those who are earning some money through non-farm activities, they also started losing the benefits particularly those occupation are directly and indirectly connected with agriculture like dairy, transportation, trade of buffaloes, and trade of husk and so on. Due to growing competition among these non-farm activities.

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