Mid -Term Impact of the District Poverty Initiative Project Rajasthan

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Preface

The study *Mid Term Impact Assessment of the District Poverty Initiative Project, Rajasthan* is commissioned by the State Project Monitoring Unit of the District Project Initiative Project (DPIP) assisted by the World Bank with the objective to study the impact of the DPIP and suggest possible future directions of the project to help revise, if necessary, the strategy being pursued. The DPIP addresses multidimensional aspects of poverty that includes mobilizing and empowering the poor and help them to develop strong grassroots organisations that facilitate access to and participation in *democratic* and *development* processes; expand the *involvement* of the poor in economic activities by improving their capacities, skills, *access to social and economic infrastructure and services and employment opportunities*; and supporting small scale sub-projects that are priority chosen, planned and implemented by the poor.

The Impact assessment has covered only a select number of Indicators identified in the Base Line Survey (BLS) conducted earlier by the Institute: efforts to remove encroachment in pasturelands and forests; shifts in cropping pattern and yield rates; access by the poor to formal institutions of credit; sending children to school; vulnerability in income and consumption patterns; access to PDS and other government programmes. The Survey was conducted in all seven districts of the DPIP and covered around 1200 households.

We find that the economic returns from the Sub Project Activities are significant, small in some cases while large in others. The impact can also be seen in terms of increase in number and productivity of assets as well as in terms of social impact seen in proportion of children going to school.

We are thankful to the Director, State Project Management Unit of the DPIP, the District Project Management Units, the Non-Governmental Organisations involved in the DPIP and the World Bank staff who helped us during the course of the study.

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Chapter I: Introduction

This study is commissioned by the State Project Monitoring Unit of the District Project Initiative Project (DPIP) assisted by the World Bank with the objective to study the impact of the DPIP and suggest possible future directions of the project to help revise, if necessary, the strategy being pursued. This was proposed to be done by using a selected number of Indicators identified in the Base Line Survey (BLS) conducted earlier by the Institute of Development Studies, Jaipur at the inception of the DPIP. We begin with a brief background of the DPIP and the salient features of the Base Line Survey.

1.1 The District Poverty Initiative Project

The DPIP recognises that poverty has multidimensional characteristics, not confined to income poverty alone but extending into the social environment in which the poor strive for an existence. The stated development objective of the DPIP is "to improve economic opportunities, living standards and social status of the poor".

The District Poverty Initiatives Project (DPIP) directs its interventions towards:

- Mobilizing and empowering the poor and help them to develop strong grassroots organisations that facilitate access to and participation in *democratic* and *development* processes;
- Improve the abilities of non-government, government and *panchayati raj* institutions to hear, reach and serve poor clients, i.e. to function in a more *inclusive* and participatory manner;
- Expand the *involvement* of the poor in economic activities by improving their capacities, skills, *access to social and economic infrastructure and services and employment opportunities*;
- Supporting small scale sub-projects that are priority chosen, planned and implemented by the poor;

1.2 The Baseline Survey: Indicators

This Base Line Survey established benchmarks for the outcome indicators of the DPIP in the light of the Project objectives and two sets of indicators were designed and data obtained from the field work conducted for the purpose during the period:

I. Indicators included in the first set are Resource Base of the area that delineates the area poverty. These cover primarily the demographic pattern, occupational characteristics of the population, Land use pattern, Water bodies, Status of agriculture including livestock, Economic infrastructure such as transport, electricity and markets, Social infrastructure of education

and health, agriculture extension, veterinary and bank credit, local institutions such as the Panchayati Raj, Caste Panchayats, Untouchability, *jajmani system* and religious institutions, Government interventions, violence against women and the Government and Civil social capital.

II. Indicators included in the second set are differentials in the poor and non-poor sample households with respect to the attributes mentioned in the Resource Base, disparities in asset ownership, productivity of land and livestock, skills, capacities to access services and organize, gender based differences in access to services, nature and functioning of informal networks and associational social capital.

1.3 Methodology of the Base Line Survey

Indicators in the base-line survey had both quantitative and qualitative dimensions. Quantitative variables were surveyed through a schedule. The qualitative indicators were studied by a combination of participatory methods, informant interviews and Focus Group Discussions.

Sampling design of the Base Line Survey

1. There are seven project districts, namely, Baran, Churu, Dausa, Dholpur, Jhalawar, Rajsamand, and Tonk. All these districts were covered.

2. Two poorest blocks in each district where the project was to be implemented were selected for the Base Line Survey. Each of these two blocks was classified into five clusters of villages. They were prioritized on the basis of poverty indicators. Before choosing the villages, we chose two clusters from the two blocks. These were the first cluster of first and second poorest blocks. The villages located in these two clusters and the remaining block/ blocks to be taken up in the last year of the project comprised the universe of villages. Six villages from each cluster where project activities were to be undertaken in the first year and 4 sample villages from the remaining two blocks (or 8 villages in case the remaining block) in the last year of the project were selected. For the last year of the project the villages from each block(s) were divided into two strata and 2/4 villages were selected at random from each strata. A total of 4/8 villages, which act as control villages were selected from the remaining block/ blocks in the final year. In this manner a total of 20 villages were selected in the sample in each district.

3. In each village a PRA exercise and Focus group discussion was undertaken to identify the households not covered in the BPL list but are as poor as the BPL households. Special care was taken to include women headed households and handicapped headed households. From the total of these BPL/poor households, 25 households were selected at random. To give due representation to the women-headed households and the handicapped, sampling with replacement was undertaken, so as to include atleast 2 women-headed households and 1 handicapped household in each village (provided such households exist in the universe). In addition, 15 non-poor households were selected at random from the village. The total number of households thus selected were 800 in each district.

Two schedules, namely, the Village schedule and the Household Schedule were developed.

1.4 The Baseline Survey: Some Major Findings

Besides the indicators framed for the Survey, some of the major findings were as follows:

1.4.1 Augmenting the Natural Resource Endowment and Building Institutions

The Base Line Survey found that there is a potential and the need to augment natural resource endowment in both Project and Control Villages. Sustainable livelihoods require a sustainable natural resource base, which is characteristically fragile in most districts of Rajasthan. Efforts to protect the natural resources and its biodiversity have been few and far between. A very small share of the pasturelands and forest area is protected. There remain unattended large tracts of barren lands and wastelands. Such lands can be suitably treated. This would check degradation and generate more resources for the livestock. More number of surface water bodies can help harnessing rainwater, which would also increase the groundwater potential. Institutions that manage the common resources are weak and largely ineffective.

Efforts to augment the natural resource endowment would benefit both the APL and BPL households alike, though initially at least the average benefit of the APL may be higher, as they collect more output from these resources. The Encroachment of forests and pasturelands reflects weaknesses of existing institutions, civil society and absence of community based institutions.

1.4.2 Land Distribution and Vulnerability Associated with Agriculture and Animal Husbandry

High incidence of landlessness among BPL households and a skewed distribution of land are characteristic features of most sample districts.

The poor adopt a cropping pattern that suits their inferior land quality and lesser availability of groundwater. Their crop yields are significantly lower than APL households where water requirements are high. Assuming that the choice of APL households reflects a higher value added option, the BLS shows that BPL households sow more of less value addition crops. Changing the cropping pattern of the poor households to high value added crops would require investments in land improvement, increasing irrigation potential, agriculture extension services, credit, and protection against risks through an insurance mechanism. The planned interventions could be group based, which provides both challenges and opportunities.

Fluctuations in agricultural output due to drought conditions expose the vulnerability of households, more in case of BPL than the APL. The availability of foodgrains to the households is reduced to the extent, which it needs to compensate through wage labour or other means.

The fall in agricultural output also influences livestock yields, the marginal decline being higher for poor households for whom crop waste fodder comes in short supply, for their already inferior quality of livestock. Livestock yields are dependent on agricultural output at the household level and attempts to increase livestock numbers or yields without increasing agricultural output may be counter productive.

1.4.3 Poor Physical Infrastructure and Services Increase Vulnerability

Physical infrastructure and services are in a poor condition in both Project and Control Villages. Once again, the average benefits of such interventions may be higher for APL households but BPL households will benefit more at the margin and the trickle down effect. They would, however, directly benefit from interventions such as road construction, which would increase the accessibility to wage labour markets. Another major beneficiary of roads could be girls who more than boys may be able to access higher education as and when the transport network improves.

Market infrastructure, especially for agricultural inputs and output is situated at a distance, which makes the role of Village Cooperative Societies more significant. An environment for smooth functioning of cooperatives and enrolment of more households is missing in an overwhelming majority of villages. Similarly, dairy cooperatives are there only in a few villages. The Fair Price Shops have irregular supplies adding to the poor's vulnerability.

School infrastructure needs suitable improvement, especially toilet facilities. In some villages there are effective VECs and in others they need to be created.

All services, namely, education, health, veterinary, agricultural extension and the public distribution system are weak and not to the satisfaction of the community there is a need to generate demand for effective services, such as regular supply in Fair Price Shops, visits of agriculture extension and veterinary agents as well as the ANM, immunisation and family planning, and schoolteachers to stay in the village itself.

The infrastructure is not only inadequate but the services that ought to be provided using the existing infrastructure are far from efficient. There are deficiencies in the delivery system but the recipient system is also weak and does not demand quality services. Both these factors increase vulnerability of poor whose access to services is severely constrained compared to the APL who have more capabilities to access services otherwise.

1.4.4 Financial Infrastructure: Availability of Credit to the Poor

Access to formal sources of credit to the poor is very limited. Moreover, the average amount borrowed by an APL borrower from a bank is almost 8 times more than what a BPL borrows. In the absence of credit from formal institutions, neither the poor are able to build their assets, nor do they get loans for agricultural inputs. The poor more than the non-poor reach out to relatives and friends or moneylenders in times of need.

A Self Help Group strategy in its infancy in some villages, can have significant empowerment effects and reduce vulnerability. It can enable poor to mobilise their savings and consequently smoothen their consumption and incomes, thus reducing the severity of poverty, help build assets and facilitate risk management.

1.4.5 Human Capital Development

Differences in human capital endowment can be seen in two ways: between APL and BPL households and between women and men. On all variables the performance is worse for BPL households and women or girls. Discrimination is evident from the sex ratio, which is an indicator of women's status. Socially excluded classes such as the Scheduled Castes have a lower sex ratio, which is a pointer to a still lower status for women in this category. In some districts APL households while in other BPL households have a higher sex ratio. The BLS shows that the ratio can be explained more in terms of social categories than economic. Higher dependency ratio and fertility ratio among BPL households add to their vulnerability status and also the hardship that women have to undergo. Tender age at marriage adds to their problems.

Inability to read and write among BPL in general and women in particular adds to the problem of acquiring new skills and access to services. For example, fewer women opt for institutional delivery, fewer households access the PHC as they do not expect empathetic response.

1.4.6 Social Capital and Gender Relations

Positive discrimination in favour of backward castes and women have given these groups more say in village affairs through Panchayati Raj Institutions. However, the dominant castes with their economic power continue to mediate between the poor and the state. A large proportion of landless households helps the dominant castes exercise their dominating influence in village affairs. The dalits in most villages are neither allowed to enter temples nor their bridegrooms are allowed to ride a mare in a wedding procession.

In most villages a single *holi* pyre is lit showing that a high level of community interaction at the village level. The *jajmani* system in most villages reflects a similar relationship.

Caste panchayats, to an extent, counter the influence of the dominating castes. It is found that households who attend caste panchayat meetings are more likely to

participate in *gram sabhas*. Caste Panchayats continue to practice traditional norms though their discourse uses the more progressive lingua.
The civil society is weak. There is little cooperation within village, in looking after common pasturelands or dealing with encroachments. The government social capital is also weak and there are many mediators between the poor and the state.

Participation in Panchayati Raj Institutions is more likely if the household has stronger kinship networks of reciprocity, participates in caste panchayat meetings, and higher is the ability to read and write with comprehension. There is a mix of such households among both APL and BPL households. However, the APL households are more likely to participate than the BPL households.

Gender roles and responsibilities follow a traditional pattern, however where girls are reaching out for higher education, there seems to be some change in gender roles and responsibilities.

The Gender Neutrality Index of decision making in households is low. Women's autonomy is greater where the ability to read and write among women is high and their engagement as casual wage labour is significant. In large size households women's autonomy is low.

Higher participation of women in economic activities and earnings can change not only gender relations but also help build a stronger social capital in the village.

1.4.7 Livelihoods and Vulnerability

There is near absence of Manufacturing and Tertiary sectors in both Project and Control Villages. This high dependence on the Primary sector alone increases the vulnerability of both APL and BPL households. Besides, such dependence on the Primary Sector has environmental consequences. Environmental degradation and vulnerability mutually reinforce each other; best reflected in times of drought, which are frequent. The BLS finds that the incomes of the households reduced by almost one-third in the drought year (the year of the survey witnessed a severe drought) from a normal year. It may also be pointed out that the per capita income of the APL households is atleast 5 times the income of BPL households.
The poor are mainly dependent on casual wage labour within and outside village for their livelihoods. Wages fluctuate seasonally as does the demand for wage labour. Women get lower wages than men.
Consumption data of food items shows that the consumption of protein, fats and sugar are vitally lower for BPL households compared to the APL. This affects their stamina and impedes prospects of good health. The Public Distribution System does not cater to these deficiencies, and is otherwise also very weak. The effectiveness of government programmes directed at the poor or area development has largely not been described as satisfactory.
The poor are largely left on their own in terms of sustaining livelihoods. Poor educational status, poor health, limited access to credit, and social exclusion, to an extent, restrain their income generating capacities.

1.5 The Mid Term Survey

The Mid term Survey was designed to obtain a quick view of the impact of the DPIP on the targeted poor households. Since the findings had to be obtained at an early date to make mid term corrections or changes, if required, a survey was designed to cover only a few of the Indicators identified during the Base Line Survey.

The Mid Term Survey is being undertaken two-and-a-half years after the inception of the DPIP. It was felt that it might be possible to capture change only in a few key areas surveyed in the Base Line. Efforts to remove encroachment in pasturelands and forests are a good indicator of how the village community is organised against the dominant interests. A number of land-based activities have been undertaken as Sub Project Activities and so expectation are that yields would increase and there is a shift towards high value addition crops. Same is the case with livestock. It is expected that the poor access formal institutions of credit more in than in the past. They would continue to send children to school and reduce the drop out rates. Finally, it is expected that vulnerability in income and consumption patterns shall be reduced via access to PDS and other government programmes. Based on these findings of the Base Line Survey and the manner in which the programme has functioned, a select number of indicators were chosen as listed in Chapter 3.

1.6 Methodology of the Mid Term Survey

As already explained in the methodology of the Base Line Survey, the sample includes Project Villages, where interventions took place in the first year of the DPIP; and the Control Villages where interventions are expected in the last year of the Project. The sample also includes the Below Poverty Line (BPL) households who are targeted for Project benefits and the above Poverty Line households in both kinds of Villages. The sampling Plan adopted for the Mid Term assessment is as follows:

Project Villages

1. The Sub project Activities (SPAs) are classified into three categories: Land based, Micro-enterprise, and Infrastructure including Social Services.
2. The SPAs in the Cluster I / II villages which formed part of our sample in the base line survey, were listed and 12 SPAs were selected in each district in proportion to their occurrence from the villages mentioned above. Only those SPAs where work was completed or nearly completed and the benefits started trickling-in, were selected. In districts where 12 completed works in Cluster I villages of Base Line Survey were not available. A few SPAs were surveyed in their present status, to bring the total to 12.
3. All the BPL households involved in the SPA among those covered in the Base Line Survey were selected.
4. A maximum of 5 BPL households not involved in SPA but were covered in the Base Line Survey were selected. Besides 7 APL households covered in the Base Line Survey from each village where SPA activities were undertaken were selected.

Control Villages

Four villages per district were selected and 13 BPL and 7 APL households were selected from those covered in the Base Line Survey.

1.7 Scheme of the Report

Chapter I introduces the need and design of a Mid Term Impact Study of the DPIP. Chapter II describes and assesses the impact of the Sub Project Activities in general, while Chapter III analyses impact on households and compares their situation with that which existed at the time of Base Line Survey. The last Chapter gives some recommendations for future directions of the Project. The district-wise tables are appended.

Chapter II: The Returns from Sub Project Activities

This Chapter provides an overview of the nature of Sub Project Activities (SPAs) undertaken in the DPIP, and the economic returns from the activities undertaken. Mainly there are three kinds of activities: The Land Based Activities, the Micro Enterprises and the Infrastructure development and social services activities. In this Chapter we shall present an assessment of the returns from each of the SPAs to the CIG members. Specifically, the increase in land yields for land based activities; economic returns and net worth: asset ratio for micro enterprises and the indirect and imputed gains from infrastructure development activities are assessed in some details.

2.1 Micro Enterprises

The micro enterprises are divided into three categories. First, the Service Sector that includes Band Baja and Tent House; Second, the Animal Husbandry that includes Dairy and Goat Rearing, and the third, Manufacturing activity that includes *Munj Ban*, Garnet, Marble Slurry Bricks, Readymade Garments, Welding Workshop, RCC Shuttering and Wooden Furniture. The number of Micro Enterprises in each of the three categories in the sample is given in Table 2.1. In three cases, production has not commenced as the assets have not been acquired. In effect, the analysis in the Tables that follows, pertains to 19 CIGs. Each CIG has between 5-14 members and the total number of members in the 19 CIGs are 163.

Table 2.1: Distribution of Sub Project Activities in the Micro Enterprises

Micro Enterprises	Number
Service sector	7
Animal husbandry	5
Manufacturing	7
Total	22

Note: In three cases: 2 in animal husbandry and 1 in Manufacturing assets have not been acquired

2.1.1 Investment in SPAs

The total investment in Projects in different Micro Enterprises is shown in Table 2.2 along with the fixed assets created. It is seen that the total investment per capita in manufacturing is half the investment per capita in other Projects, which shows that there may be a scope for technology adoption and innovations in design for SPAs in the manufacturing category, especially for increasing market penetration and making the produce more competitive.

2.1.2 Net worth

The net worth of a micro enterprise unit is defined as the difference between the assets and their liabilities. In other words, the net worth is the difference between

(A) The asset: total fixed capital and present stocks, including savings and cash-in-hand, and (B) The net liabilities: bank credit, and self-investment, less repayments. The net worth to fixed asset ratio indicates the extent to which capital has been used to finance fixed capital formation. The unit will be in a better position if the ratio is high enough. A ratio greater than unity means that part of net worth is being utilised for building current assets including cash reserves. A ratio greater than one also means that the unit is more creditworthy.

The net worth ratio is high for all micro enterprises. The net worth: asset ratio in the service sector and manufacturing is high (above 0.95) but low (0.46) in the animal husbandry sector, as seen in Table 2.2.

2.1.3 Liability

The CIGs have incurred liability from bank, private sources and own sources to invest in the project. The total liability of the 19 CIGs is Rs. 26 lakhs, which is 24 per cent of assets created. See Table 2.2.

Table 2.2: Investment in Projects, assets created and net worth of 19 projects (Rs.)

Micro Enterprises	Total Investment of Project (Rs.)	Percent own contribution	Fixed Assets (Rs.)	Total Members in the CIG	Investment per capita (Rs.)	Net worth (Rs.)	Net worth: asset Ratio	Liability (Rs.)	Liability: Asset Ratio
Service sector	2103808	10	1888888	64	32872	1839068	0.97	248181	0.13
Animal husbandry	1641800	20	562500	47	34932	257936	0.46	379264	0.67
Manufacturing	822811	10	535346	52	15823	511085	0.95	77050	0.14
Total	4568419	12	2986734	163	28027	2608089	0.87	704495	0.24

2.1.4 Incomes and returns per unit of investment

The income per month for a CIG member varies between Rs. 735 to Rs. 1424 per month for different enterprises (See Table 2.3). These incomes are additional to what the households earn from other sources. Based on the annual estimates of income streams, the estimated returns per unit of investment are shown in Table 2.4. These are highest (0.68) in the Manufacturing Units, followed by 0.49 and 0.27 in the Animal Husbandry and Service Sector units respectively. The result points to the fact that returns may increase if there is more investment in higher technology and innovative designs.

Table 2.3: Distribution of incomes from the Micro Enterprises

Micro Enterprises	Income of all CIG members in last one month (Rs)	Total members in the CIGs	Average Per CIG member income per month (Rs)
Service sector	564480	64	735
Animal husbandry	802920	47	1424
Manufacturing	558600	52	895
Total	1926000	163	985

Table 2.4: Returns per unit of investment (Rs)

Micro Enterprises	Total investment	Estimated income per annum	Estimated returns per unit of investment
Service sector	2103808	564480	0.27
Animal husbandry	1641800	802920	0.49
Manufacturing	822811	558600	0.68
Total	4568419	1926000	0.42

2.2 Infrastructure and Services

The DPIP provides for development of small village level infrastructure. These have been classified into 5 categories as in Table 2.5. These include Roads: inter-habitation roads and small civil works including culverts and bridges; Drinking Water: providing hand pumps, small ponds and wells; School buildings including their boundary walls; Sanitation including bath spaces for women; and Community Halls for multipurpose uses. The CIGs and *panchayats* undertook a number of infrastructure development works. In our sample we have 39 infrastructure projects.

Table 2.5: Distribution of Sub Project Activities in the Infrastructure and Social Services

Infrastructure	Number
Road	14
Drinking water	13
School	7
Sanitation	4
Community hall	1
Total	39

2.2.1 Investments in Projects

The infrastructural works are small in size, the largest being in a drinking water project amounting to Rs. 13 lakh. Table 2.6 shows investments in various infrastructural works. The average investment per CIG member is Rs. 222194. However, almost all inhabitants of the village share the benefits of infrastructural works.

Table 2.6: Investment in Projects and Investment per capita (Rs)

Infrastructure	Total investment in the Project (Rs)	Mean investment (Rs)	Per cent Own Contribution (Rs)	Total Members in the CIG	Investment Per CIG member (Rs)
Road	6552021	468002	10	11	595638
Drinking water	4791097	368546	10	10	479110
School	1374016	196288	10	11	124911
Sanitation	294000	73500	10	12	24500
Community hall	98296	98296	10	15	6553
Total	13109430	1204631	10	59	222194

2.2.2 Returns per unit of investment

Our survey finds that the gains from creating small infrastructure at the village level are very high and shared by a cross section of the community. We shall first present some of the gains reported by the communities, which benefited from construction of roads and bridges. Many of these gains are difficult to quantify, yet we shall attempt to do the same in a few cases for illustrative purposes.

The construction work has been completed in the last one year and the benefits started trickling in soon after completion of work. While we present a list of economic gains in the immediate, the long-term gains may be larger, reflected in market penetration, increased agricultural yield, and returns to education and better health.

Gains reported by the communities using roads/ bridges

- Economic gains due to increased access to wage labour
- Increased transportation to the village: lower cost of transportation of men, women, goods and commodities
- Increased hygienic conditions and improved health environment
- Increased number of boys and girls attending higher levels of school:
  (i) Village Reti (Dholpur); Village Lehruni (Baran): Children were forced to take vacation as they could not reach school due to seasonal flooding. The teacher from the neighbouring village also absented himself
  (ii) Village Pahari (Baran) : Three girls and 10 boys are now going to middle school 3 Km away

- Increased number of visits by the health personnel and veterinary
  (i) Village Reti (Dholpur): The ANM did not visit the village during rains
  (ii) Village Lehruni (Baran): The ANM can reach on all days.

- Increase in earnings from sale of crops due to access to markets
- Easy access to livestock
  (i) Village Reti : Animals used to break their legs as they skid in the wet muds. 7 animals broke their legs in one year.
- Entry of small players in the market
- Increased and timely access to hospital
  (i) Village Gajwara (Jhalawar): Patient used to be carried on a cot (*charpai*); now access to jeep.

- Construction of a bridge has helped to save houses from floods
- Teachers are more regular and come in time.
- Access to own farms
- Access to milk market
- Transport of goods of daily consumption made simple
- Convenient transportation to hospital for pregnant women
- Increased means of transport (including privately owned)

Some other instances of benefits from roads are summarised below:

The cost of the bridge and *kuhranja* (pitching) is Rs. 2,93,311. The estimated returns from increase in wage earnings alone are Rs. 66,000 per annum, calculated on an average gain of Rs. 600 per household for 100 households in the village. The return on this account alone is 0.22 per rupee of investment.

Village Modwa (Rajsamand): Mines have started in the village due to the road. Eight members of the community get employed in the mines. If each worker works for 150 days in a year, they have an earning of Rs. 9000 per annum, which is an extra earning of Rs. 3000 per annum per person.

Village Modwa (Rajsamand): Ten members of the community have purchased bicycles and now cycle to the wage market saving Rs 5 per day per person. Assuming that they commute for 20 days in a month, they save around Rs. 100 per person per month.

We shall illustrate three cases of how gains can be imputed accruing due to improved transportation and communication, resulting from road construction. See Tables 2.7 - 2.9.

Table 2.7: Estimated Benefits of Road Construction in Village Akya Gehlot, District Jhalawar

S. No.	Type of Benefit	Rate of Benefit (In Rupees)	Estimated Number of Beneficiaries	Total Benefit (In Rupees) Per Annum
1	Villagers had to go on foot to Kundla for wage labour. So, they worked just for 6 hours instead of 8 hours a day and got Rs. 50 as wages per day. They now work for 8 hours and get Rs. 60 as wages.	10	50	For 150 days in a year Rs. 75,000
2	Better price information of farm produce	500	20	10,000
3	Production and sale of vegetables	50	3	For 150 days in a year 15,000
4	Livestock can now access grass as there is a bridge across the *nala*. There is saving on purchase of fodder.	50	40	2,000
5	Savings on accessing hospital .	200	10	2000

6	Sale price of milk increased by Rs 5 per litre	Rs 15 per person	150 per day	For 200 days 30,000
	TOTAL			134,000
	Total Benefits per annum /Cost of road construction (Rs 134000/ 491591)			0.27

Table 2.8: Estimated benefits from road construction: Village Gogasar, District Churu

S. No.	Type of Benefit	Rate of Benefit (In Rupees)	Estimated Number of beneficiaries	Estimate of Benefit (In Rupees)	Estimated benefits per annum
1	Children of 5 villages can now access school on bicycle. Earlier they had to pay for transport. The saving per village on bus fare is as under: (i) Malasar (ii) Melusar (iii) Pabusar (iv) Hamusar (v) Kangar Chainpura	 1 2 3 4 3	 40 15 15 15 50	Per day 40 30 45 60 150	Estimated at 20 days per month for 10 months in a year Rs 65,000
2	Earlier, the school boundary and hospital boundary was surrounded by mud. Due to this they had to be plastered every year. Now there is no mud and there is saving of expenditure on plaster.	500	2	1000	Rs 1000
3	Some labourers, who are artisians, used to go for labor before and earned Rs. 80 per day. But after the road construction they opened shops nearby the road and are earning Rs. 70 extra per day than before.	Rs 70 per day	6	Rs 420 per day	Say for 150 days in a year 63,000
4	The potter buys pottery from else where and sold in the village. He bought 5 truckloads of pottery and he paid Rs. 20 per camel cart for bringing pottery from bus stand to the village because heavy vehicles could not reach to the village before. But now it is not a problem.	Rs 800	3	Rs 2400 per annum	Rs 2400

5	To the iron shops in the village and Rs. 640 per annum on 4 carts.	640	4	Rs 2640 per annum	Rs 2640
6	Prior to road construction tempo owners in the village have to cover a long distance to reach the village. But now there is no problem like that.	35 (Per Day for Diesel)	7	For 20 days in a month for 10 months	Rs 7000
7	Increased wage earnings as wage earners are able to put in more hours of work each day .	Rs 7	20	Rs 140 per day	Say 150 days in a year Rs 21000
8	Farmers had to pay the cart owner more for bringing their produce home. But now they can hire more efficient vehicles for less rent than before.	Rs 20 per round for 10 rounds in a season	30 farmers	Rs 6,000	Rs 6000
	Total Benefits per annum /Cost of road construction (Rs 168040/ Rs 420188)				0.40

Table 2.9: Estimated benefits from Kharanja and bridge construction: Village Pahari, Baran

Number of CIG member	Direct benefit (Rs)	Indirect benefit	
		Nature	Amount gained (Rs)
1	3420	Last year spent Rs 900 on malaria; last year could not go for wage labour outside the village for 22 days and lost Rs.1100 as wages;	2000
2	420	Could not go to work for 20 days	600
3	900	Last year spent Rs. 1000 on malaria	2200
4	780	Wage	1500
5	900	Animal husbandry	10,000
6	480	Wage	1600
7	1800	Wage	600
8	480	Wage	500
9	420	Wage	1100
10	900	Wage	600

2.2.3 Drinking Water

Accessing drinking water takes time in most parts of rural Rajasthan. Gains from improved access to water have been calculated by imputing a value of Rs 10 per hour spent in fetching water. Besides, there has been increase in livestock owned by the households. In this manner we find that the per household imputed income amounts to Rs 2773 per household per month.

2.2.4 School Building

The imputed value of increased enrolment in schools has **not** been imputed, as this has not been our objective. But we have only apportioned the cost of transport to a higher level school in a neighbouring school. Some instances are reported below:

Village Malpura (Churu)
Construction of two rooms has led to upgradation of the primary school to middle school. 80 children, especially girls of this village and surrounding village, who would have dropped out of the educational system, are now able to go to school.

Two members of the CIG reported that they are saving almost Rs 1000 per annum each on transport costs of children who went to school in a nearby village. These children also save around 3 hours a day on commuting time.

The school is also being used for marriage ceremonies in the village.

2.2.5 Community Hall

In villages where there are not many pucca buildings, Community halls have helped in organising marriages and other festivities. The community imputed a value of Rs 2500 per occasion, being of opportunity cost of holding an event.

2.2.6 Sanitation

In some villages bathrooms have been built mainly for use of women.

2.2.7 Estimates of returns on investments

While the monetary returns have been imputed and summarised in Tables 2.10, the social returns of investment such as improved access to health and more children going to school have not been estimated in the Table.

Table 2.10.: Distribution of Incomes from the Infrastructure

Infrastructure	Total Investment (Rs)	Imputed gains from infrastructure to all CIG Members (Rs)	Total Members in the CIGs	Per Household Income (Rs)	Returns (only to CIG members) Per Unit of Investment
Road	468002	24901	11	2264	0.05
Drinking water	368546	26881	10	2773	0.07
School	196288	13732	11	1217	0.07
Sanitation	73500	6475	12	563	0.09
Community hall	98296	17268	15	1151	0.18
Total	336139	89257	59	1513	0.06

2.3 Land based activities

In all there were 24 CIGs in the sample that were involved in land based activities. A number of SPAs have been designed in this category. First is the Integrated Agriculture Development Programme: which included augmenting water supply for irrigation by providing a well or an anicut, or deepening an existing well; making efficient use of water using pump sets and sprinklers; and promoting bio-farming through production and use of wormi-compost. Second category includes irrigation wells and the third category includes water harvesting and land leveling along with horticulture activity, or otherwise.

The area under cultivation of the members of the 18 CIGs where benefits started trickling in, increased by 35.5 bigha (12 per cent). The irrigated area increased by 170 bigha (115 per cent). The income per CIG member increased in the range of Rs. 2250 - Rs. 9900; the average being Rs. 6817 per CIG member. The returns from 18 land-based activities are summarised in Table 2.11.

The total investment in the 18 land based activities has been Rs. 47,68,555 and the estimated annual returns (in the first year) has been Rs. 9,56,107. The returns per unit of investment vary between 0.10 and 0.78, the average being 0.20. Higher returns are reported by CIGs who chose to grow vegetables and were able to access the market and command a remunerative price for their produce. See Table 2.11.

Increase in yield is reported by most farmers. The increase in yields from various crops is given in Table 2.12.

Table 2.12: Increase in yield of various crops

Crop	Range of increase in yield (quintals per bigha)	Highest yield attained (quintals per bigha)
Bajra	0.25 to 2.0	6.0
Maize	0.2 to 0.5	5.0
Kharif oilseed	0.5 to 0.7	1.5
Kharif pulses	1.0 to 2.0	6.0
Wheat	1.0 to 5.0	12.0
Barley	1.0 to 3.5	8.0
Rabi oilseed	1.5 to 3.5	4.0
Rabi pulses	1.5 to 2.5	6.5

Table 2.11: Investment in the SPA, increase in area cultivated and irrigated, estimated incomes and returns per unit of investment

SNO	District	SPA	Total CIG mem-bers	Mem-bers in base line	Invest-ment in the Project (Rs)	Area cultiva-ted before (bigha)	Area cultiva-ted after (bigha)	Incre-ase in area cultiva-ted (bigha)	Area irriga-ted before (bigha)	Area irriga-ted after (bigha)	Incre-ase in area under irriga-tion (bigha)	Income per member (Rs)	Estim-ated income of all CIG mem-bers (Rs)	Estim-ated returns per unit of inves-tment (Rs)
1	Dausa	IADP	6	4	177105	14.5	16.5	2.0	13.5	16.5	3.0	3403	20415	0.12
2	Dausa	IADP	6	2	252180	13	13	0.0	13	13	0.0	4275	25650	0.10
3	Dausa	Engine pipe	8	6	347987	23	23	0.0	12	23	11.0	9867	78937	0.23
4	Dausa	Engine pipe plus vegetable	5	4	153513			0.0			0.0	4825	24125	0.16
5	Dausa	Engine pipe	11	6	142200	27	27.5	0.5	27	27.5	0.5	6792	74708	0.53
6	Dausa	Engine pipe plus vegetable	14	8	129800	31	39	8.0	23.5	37	13.5	7188	100625	0.78
7	Dholpur	Irrigation well	10	6	250000	24	26	2.0	11	26	15.0	2250	22500	0.09
8	Dholpur	Irrigation well	8	4	248000	0	16	16.0	0	16	16.0	5525	44200	0.18
9	Dholpur	Irrigation well	6	3	348000	16.25	18.75	2.5	0	18.75	18.8	6983	41900	0.12
10	Dholpur	Irrigation well	8	1	337000	14.5	14.5	0.0	0	14.5	14.5	8500	68000	0.20
11	Jhalwar	Irrigation well	5	1	239000	27	27	0.0	7	27	20.0	5800	29000	0.12
12	Jhalwar	Irrigation well	5	2	238500	25	25	0.0	5	25	20.0	5850	29250	0.12
13	Jhalwar	Irrigation well	5	3	265000	19	19	0.0	8	24	16.0	7500	37500	0.14
14	Tonk	Anicut	8	2	284000	16.5	16.5	0.0	0	13	13.0	9900	79200	0.28
16	Tonk	Anicut	9	4	599000	13.5	14	0.5	3	5.5	2.5	8200	73800	0.12
17	Tonk	Irrigation well	11	3	388000	10.5	12.5	2.0	1	5	4.0	9967	109633	0.28
18	Tonk	Medbandi	11	8	369270	29.2	31.2	2.0	23.2	25.2	2.0	8788	96663	0.26
	Total		136	67	4768555	303.95	339.45	35.5	147.2	316.95	169.8	6817	956107	0.20

Chapter III: Impact on households

Introduction

The IDSJ had undertaken a Base Line Survey for the DPIP in all seven-project districts at the project start up. A mid term impact assessment is proposed to be carried out for possible future directions to the project and revise, if necessary, the strategy of the project. A set of Indicators was identified in the base line survey. It was proposed that some of the important indicators therein be selected for re-survey to capture the mid term impact. A list of such Indicators is given below:

3.1 List of indicators to assess the mid-term impact of DPIP

Natural Resource Endowment

Change in encroachment of forest in pastureland
Change in number of livestock units by household
Change in foodgrain produced and consumed
Change in yield of livestock

Financial infrastructure

Change in household reporting borrowing from bank
Change in number of self help groups

Human Capital

Change in educational status of children in age group 6-14, regions for drop out if any

Vulnerability

Change in income and consumption
Change in access to public distribution system
Change in access to other Government Programmes

3.2 Number of households in the sample

The total number of households in the sample is 1251 of which 282 have directly benefited from the DPIP, being members of a Common Interest group (CIG). Besides, there are 124 other BPL households who are in the same villages as the CIG members, have not participated in the project, but benefited indirectly, in some cases substantially, as the evaluation shall show. A large number of APL households as well as Control Village households have been chosen for comparison of the outcomes of DPIP interventions and the changes, if any, in the relative positions of the benefiting households. Thus we have five categories of households: "BPL in DPIP", those who are members of CIGs, "Other BPL", those below poverty line households who reside in the same village as the CIG members but are themselves not members of the CIGs; the APL households of the Project

Villages and the BPL and APL households in the Control Villages. (the Project Villages are those villages where DPIP intervenes in the first year of the Project and the Control Villages are those where DPIP interventions begin in the last year of the Project).

The number of households vary from one district to the other as only those households had to be covered for which base line data is available as seen in Table 3.1.

Table 3.1: Number of sample households

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Number of sample households	282	124	285	364	195

3.3 Change in household size

There has been a significant increase in household size in all categories other than the "Other The reported increase in household size is largest among the benefited BPL households, which would level off some of the gains from the DPIP. BPL" category. The increase is largest among the APL households in the Control Villages. See Table 3.2.

Table 3.2: Change in mean household size

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Base Line	5.5	4.8	6.3	5.2	5.9
Mid term	5.9	4.8	6.6	5.4	6.4
Per cent increase in households' population	6.5	2.0	4.1	2.6	8.0

3.4.1 Natural Resource Endowment: Common Property Resources

The poor households depend relatively more than the others on the natural resource endowment that they can access. While the privately owned distribution of natural resources is skewed, and the DPIP intervenes at the margin to make it favorable to the poor, the commonly owned and used natural resource endowment is rather unkept and also encroached, mainly by those who are well endowed with other privately owned resources. During the base Line Survey, 68 per cent of the resurveyed villages had encroachment on the Common Property Resources. No change has been reported on the encroachment status from any of the villages. This issue needs to be addressed by the NGOs.

3.4.2 Natural Resource Endowment: Private Land

As the Survey covers those households who benefited from DPIP, we find that the number of households having access to irrigation increased from 84 to 138, while other BPL from 29 to 39, showing that in the same villages other BPL also benefited. A close scrutiny of Table 3.3 shows that households across categories find opportunities to invest in land. The DPIP has helped the poor achieve this remarkably.

Table 3.3: Change in irrigated land area

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Base Line irrigated area					
Mean	3.0	2.9	9.5	3.5	14.6
Sum	248	73	1684	291	1795
Number of households	84	25	177	83	123
Mid term irrigated area					
Mean	2.9	3.3	9.3	2.7	13.1
Sum	403	130	1875	276	1559
Number of households	138	39	202	103	119
Change in mean irrigated area	-1.1	13.7	-2.4	-23.4	-10.2
Per cent increase in number of house-holds now possessing irrigated land	64.3	56.0	14.1	24.1	-3.3

3.4.3 Natural Resource Endowment: Livestock

One of the positive impacts on the benefited households is the increase in the number of milching cattle and buffaloes they have come to own, as against the other households, which have experienced a decline. The per cent increase in yield is also highest among the benefited households. The number of goats and sheep has declined among all categories of households, which is a reflection of the drought conditions that prevailed in the districts. See Table 3.4.

Table 3.4: Change in numbers and yield of livestock

Survey		Project Villages			Control Villages	
		BPL in DPIP	Other BPL	APL	BPL	APL
Change in the average number of milching cattle owned by households						
Base Line	Average number of cattle	0.9	1.0	1.3	1.1	1.4
	Number of households	49	35	94	83	73
Mid	Average number of cattle	1.0	1.1	1.3	1.1	1.5

Term	Number of households	55	32	81	63	57
	Percent increase/ decrease in number of cattle	+29.5	-2.9	-15.9	-22.8	-14.0
	Percent increase/ decrease in number of households	+12.2	-8.6	-13.8	-24.1	-21.9
Change in yield from milching cattle (litres per lactating period						
Base Line	Base Line Survey year (Drought Year)	248	361	448	435	460
	Base Line Normal Year	320	413	561	516	581
Mid Term	Mid Term	607	554	678	851	994
	Percent increase/ decrease in yield over DY	145	53	51	96	116
	Percent increase/ decrease in yield over NY	90	34	21	65	71
	Percent increase/ decrease in number of households	+12.2	-8.6	-13.8	-24.1	-21.9
Change in the average number of milching buffaloes owned by households						
Base Line	Average number of buffaloes	1.0	0.7	1.3	1.1	1.4
	Number of households	84	43	195	89	120
Mid Term	Average number of buffaloes	1.2	1.0	1.4	1.1	1.5
	Number of households	84	27	189	92	125
	Percent increase/ decrease in number of buffaloes	19.0	-37.2	-3.1	3.4	4.2
	Percent increase/ decrease in number of households	0.0	-12.5	-0.4	3.0	7.7
Change in yield from milching buffaloes (liters per lactating period)						
Base Line	Base Line Survey year (Drought Year)	812	697	1267	1123	1380
	Base Line Normal Year	999	830	1575	1321	1616
Mid Term	Mid Term	1276	1107	1422	1158	1854
	Percent increase/ decrease in yield over DY	57	59	12	3	34
	Percent increase/ decrease in yield over NY	28	33	-10	-12	15
	Percent increase/ decrease in number of households	-9.6	-21.2	-29.1	-15.4	-29.5
Change in the average number of goats owned by households						
Base Line	Average number of goats	1.2	1.1	1.1	1.9	2.2
	Number of households	138	49	104	133	59
Mid Term	Average number of goats	1.8	1.5	1.7	2.1	1.9
	Number of households	86	27	45	101	49
	Percent increase/ decrease in total number of goats	-37.7	-44.9	-56.7	-24.1	-16.9
	Percent increase/ decrease in number of households	-9.6	-21.2	-29.1	-15.4	-29.5
Change in the average number of sheep owned by households						
Base Line	Average number of sheep	7.2	0.4	0.1	30.9	26.7
	Number of households	10	17	17	7	9
Mid Term	Average number of sheep	16.8	5.0	0.0	20.8	33.5
	Number of households	4	1	0	4	4
	Percent increase/ decrease in total number of sheep	-60.0	-94.1	-100.0	-42.9	-55.6
	Percent increase/ decrease in number of households	-6.9	-16.7		-61.6	-44.2

3.4.4 Natural Resource Endowment: Foodgrain production

The dependence of the poor on their land is quite evident. While small farms are expected to have higher yield due to more labour intensive care, this has not been the case for the BPL farmers in the state of Rajasthan as their access to input and farm knowledge is scarce. We find that the yield rates of most crops have increased over the drought period but are not reported to have crossed the highest level achieved in the recent past. The yield rates reported by the benefited households are either lower than those of the APL households are or at best equal to them. This is an overall situation and does not reflect the increase in yield of those households who have acquired irrigation facilities from the DPIP. Nor it is large enough to offset the existing position of the BPL households in the DPIP. The DPIP does not directly focus on augmenting access to farm inputs and knowledge, failing which the BPL households are left on their own initiatives that are far few and sporadic. An opportunity to address some of the concerns is being lost by the NGOs and the state that with marginally more inputs can improve the situation. Table 3.5 shows changes in the yields of different crops.

Table 3.5: Changes in yields of crops

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Change in the yield of Bajra					
Base Line DY yield (qtls/bigha)	1.4	1.6	1.5	0.7	0.9
Base Line NY	2.7	3.0	2.8	1.7	2.2
Mid Term	2.3	2.4	2.4	2.2	2.1
Change in the yield of Maize					
Base Line DY	0.9	0.5	1.2	0.4	1.1
Base Line NY	2.7	2.7	3.0	2.9	2.8
Mid Term	1.9	1.7	2.0	1.4	2.4
Change in the yield of Jowar					
Base Line DY	0.7	0.8	1.1	1.0	1.0
Base Line NY	1.8	3.4	2.3	2.7	1.7
Mid Term	1.3	2.5	1.6	1.5	1.9
Change in the yield of Kharif pulses					
Base Line DY	1.6	1.8	0.9	3.7	1.9
Base Line NY	1.2	2.7	2.2	1.5	1.7
Mid Term	1.9	1.9	0.9	5.4	1.4

Change in the yield of Groundnut					
Base Line DY	2.2	1.7	1.5	1.1	1.8
Base Line NY	2.7	2.8	2.1	3.6	3.1
Mid Term	2.6	2.0	2.8		
Change in the yield of Soyabeen					
Base Line DY	1.7	3.4	0.7	0.8	1.7
Base Line NY	2.6	2.3	2.8	2.3	2.4
Mid Term	1.9	2.3	2.2	1.9	1.8
Change in the yield of Gwar					
Base Line DY	0.5	1.4	1.2	0.3	0.5
Base Line NY	1.5	2.9	2.3	1.4	1.8
Mid Term	4.1	2.1	1.8	3.6	1.4
Change in the yield of Wheat					
Base Line DY	1.3	1.4	1.2	1.4	1.2
Base Line NY	4.8	5.3	5.2	5.2	5.5
Mid Term	4.5	3.7	4.3	4.7	4.8
Change in the yield of Barley					
Base Line DY	2.2	2.0	3.3	1.9	2.4
Base Line NY	2.4	4.0	3.1	3.7	4.0
Mid Term	3.0		3.5	0.3	1.7
Change in the yield of Rabi pulses					
Base Line DY	1.8	2.9	2.0	0.2	0.5
Base Line NY	2.0	3.2	2.1	1.1	1.2
Mid Term	2.3		2.2	3.2	3.1
Change in the yield of Rabi Oilseeds					
Base Line DY	1.8	1.5	2.2	1.6	2.1
Base Line NY	2.8	2.8	2.9	2.4	2.8
Mid Term	2.7	2.9	2.6	2.8	2.2

3.5 Financial Infrastructure

There is insignificant change in access to banks between the Base Line and Mid Term periods. See Table 3.6. As far as Self Help Groups are concerned, the number of Self Help Groups, other than those formed in the DPIP have remained unchanged (Table 3.6A). In DPIP, Self Help Groups were formed in the process of

making of the CIGs and opened savings accounts with the banks in the Project Villages. Some CIGs used their savings for making their 10 per cent contribution to the Project. It is too early to say if they will continue to collect their savings and act as Self Help Group. There is a need to network and support the SHGs or the CIGs.

Table 3.6: Change in access to bank credit

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Base Line	10.3	8.9	17.9	14.0	14.9
Mid term	11.3	4.0	16.1	11.5	12.8

Table 3.6A: Change in number of Self Help Groups with access to bank credit

	Project Villages	Control Villages	Total
Number of villages resurveyed	49	28	77
Number of villages with SHG at the time of Base Line	32	4	36
Number of villages with SHG at the time of Mid Term Survey (other than CIGs)	32	4	36
Number of CIGs / SHGs formed	85		85

3.6 Human Capital

An indirect but crucial indicator of well being is the child going to school. This indicator shows the willingness and the ability of the household to afford education given the costs, including the opportunity costs of the child to attend a school. The opportunity costs are relatively higher for the poor households.

The evaluation data reveals that despite the costs, the benefited BPL households are sending their children to school. It seems that the DPIP has had an indirect and persuasive impact on the parents to send their children to school. The linkage is not very clear and needs to be explored to take an informed conclusion. The data is revealing: BPL in DPIP has the lowest drop out between Base Line and Mid Term (Table 3.7). Higher proportions (than other categories) of their boys are going to school, but a lesser proportion of their girls go to school. This shows that other things remaining the same, the BPL in DPIP are prepared to invest more in their boys, having realized that returns from human capital may be more rewarding than those from natural assets. However, they discriminate more with their girls: only half the proportion of boys goes to school. Despite their intentions to give their children good education they are constrained to spend less than all other categories of households.

There are very few private schools and those are also in a few villages. Thus most children go to government schools, having little choices. The costs of private schooling are higher (See Table 3.7). A higher proportion of APL households than the BPL households sends their children to private schools. The main reason for not going to school is financial constraint and engaging in household activity in and outside the household as far as the poor households are concerned; for the rich the main reason is the unwillingness of the child to go to school, as shown in Table 3.8.

Table 3.7: Per cent children dropped out, going school, mean expenditure and type of school

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Per cent children who dropped out between the Base Line and the Mid Term					
Boys	6.2	11.8	11.9	16.6	23.0
Girls	1.7	-18.2	15.7	29.3	22.5
Per cent children going to school at the time of Base Line					
Age group 6-11 at the time of Base Line: Boys	81.5	62.5	93.2	79.9	98.1
Age group 6-11 at the time of Base Line: Girls	66.4	58.7	73.9	71.4	86.7
Age group 12-14 at the time of Base Line: Boys	81.2	76.2	87.4	74.7	95.5
Age group 12-14 at the time of Base Line: Girls	48.8	40.0	60.0	52.5	84.6
Per cent children presently going to school (Mid term)					
Age group 6-11 at the time of Base Line: Boys	81.5	64.3	87.7	72.7	76.9
Age group 6-11 at the time of Base Line: Girls	69.8	71.7	68.1	53.4	73.3
Age group 12-14 at the time of Base Line: Boys	63.8	42.9	66.7	48.2	70.5
Age group 12-14 at the time of Base Line: Girls	32.6	40.0	38.2	29.5	51.3
Mean expenditure (in Rs) incurred per annum on education (Mid term)					
Boys	677	666	1108	732	1354
Girls	532	488	699	500	812
Children by type of school (per cent)					
Boys:					
Government school	88.4	93.3	85.0	91.2	68.4
Private school	8.8	6.7	14.5	8.8	31.6

Alternate school	2.8	0.0	0.0	0.0	0.0
Girls:					
Government school	93.2	89.7	93.1	86.5	77.9
Private school	6.8	10.3	6.9	13.5	20.9
Alternate school	0.0	0.0	0.0	0.0	1.2
Expenditure on education by type of school (Rs per annum)					
Base Line					
Government school	306	352	432	315	428
Private school	977	1215	1152	1012	1640
Mid Term					
Government school	561	497	767	540	795
Private school	1352	1557	2480	1595	2008

Table 3.8: Reasons for not going to school

Reasons	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Boys					
School too far/ dysfunctional	0.0	8.0	8.0	5.3	100.0
Financial constraint	31.3	28.0	8.0	2.6	0.0
Attending domestic chores/ looking after siblings	3.1	0.0	0.0	28.9	0.0
Participation in household economic activity	15.6	28.0	16.0	2.6	0.0
Participation in paid economic activity outside the household	15.6	4.0	20.0	21.1	0.0
Parents do not feel important	3.1	12.0	0.0	13.2	0.0
Child unwilling	18.8	16.0	44.0	0.0	0.0
Married off	3.1	0.0	0.0	23.7	0.0
Parents not in favour due to social customs	6.3	0.0	0.0	7.9	0.0
Social discrimination	0.0	4.0	0.0	0.0	0.0
Others	3.1	0.0	4.0	0.0	0.0
Number of drop outs	32	25	25	38	1
Girls					
School too far/ dysfunctional	2.2	0.0	11.4	2.0	26.7
Financial constraint	8.9	10.0	6.8	15.7	6.7
3Attending domestic chores/ looking after siblings	13.3	0.0	18.2	2.0	0.0
Participation in household economic activity	13.3	10.0	9.1	13.7	6.7
Participation in paid economic activity outside the household	4.4	0.0	0.0	3.9	20.0
Parents do not feel important	6.7	50.0	25.0	17.6	0.0
Child unwilling	26.7	0.0	13.6	25.5	0.0
Married off	13.3	10.0	11.4	11.8	33.3
Parents not in favour due to social customs	6.7	20.0	2.3	5.9	6.7
Social discrimination	2.2	0.0	0.0	0.0	0.0

Health problems related to child	0.0	0.0	2.3	0.0	0.0
Others	2.2	0.0	0.0	2.0	0.0
Number of drop outs	45	10	44	51	15

3.7.1 Vulnerability: Fluctuations in own production

In a state where droughts visit so very often, fluctuations in own farm production increase the vulnerability of the poor households. Table shows this vulnerability for three time periods: a drought year of the base line survey (Base DY), a peak period in the recent past (Base NY) and the Mid Term, which is overall not a drought year. The exigencies of the situation determine the extent to which a household will retain the farm produce for home consumption and the months of foodgrain left with it for own consumption. It is also the case with fodder (Table 3.9). A higher availability of fodder determines the number of milching cattle and their yields. Similarly, nutrition of the household is determined to a great extent by what is produced on own farm. The DPIP has invested in some places in augmenting the natural resources for increased production.

Table 3.9: Change in the household level retention of grain and fodder

		Project Villages			Control Villages	
		BPL in DPIP	Other BPL	APL	BPL	APL
Per cent output retained for household consumption	Base DY	59.6	57.2	58.9	80.6	60.1
	Base NY	69.9	58.1	54.2	73.0	49.2
	Mid Term	86.6	85.4	66.9	85.6	69.9
Months of foodgrain left for household consumption	Base DY	5.4	5.1	10.2	5.3	8.6
	Base NY	8.7	8.1	11.2	9.3	11.0
	Mid Term	8.0	8.7	9.5	8.0	9.1
Percent fodder retained	Base DY	65.6	63.6	76.4	80.3	78.8
	Base NY	80.1	74.6	81.2	81.8	80.4
	Mid Term	94.1	98.0	96.3	90.0	95.2
Months of fodder needs fulfilled	Base DY	4.2	3.6	6.4	3.2	6.9
	Base NY	7.0	6.4	9.0	7.0	9.9
	Mid Term	7.6	8.3	9.7	8.1	10.2

3.7.2 Vulnerability: Consumption

An indicator of increase or decline in vulnerability is the change in the level of consumption of food items. In general, the consumption of most commodities by BPL households is less than that of the APL households. The decline in consumption, howsoever marginal of items such as milk and pulses, despite higher production in the household, indicates the extent of market penetration detrimental to the nutritional status. While, less amount is spent on food items, the expenditure on items other than food, including education and health of the BPL in DPIP households is higher than of the Other BPL households (Tables 3.10, 3.11 and 3.12)

Table 3.10: Change in Grain consumption Per capita per month

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Base Line	15.1	14.5	15.8	14.6	16.8
Number of households	282	124	284	364	195
Mid Term	13.8	14.2	15.1	14.3	15.9
Number of households	282	124	284	364	195

Table 3.11: Change in consumption Per capita per month

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Base Line					
Number of persons	1563	605	1784	1890	1147
Pulse	0.32	0.33	0.45	0.35	0.50
Oil	0.34	0.33	0.46	0.35	0.49
Milk	5.83	5.19	9.00	5.63	9.24
Curd	0.54	0.41	1.34	0.53	1.31
Pure ghee	0.14	0.12	0.27	0.17	0.31
Sugar	0.77	0.81	0.96	0.82	1.14
Gur	0.13	0.17	0.23	0.08	0.12
Mid term					
Number of persons	1564	589	1785	1890	1157
Pulse	0.29	0.30	0.35	0.27	0.42
Oil	0.32	0.31	0.50	0.59	0.40
Milk	5.66	5.71	8.25	6.18	9.02
Curd	1.21	1.21	2.71	1.19	2.79
Pure ghee	0.12	0.13	0.28	0.40	0.31
Sugar	0.61	0.62	0.68	0.68	0.86
Gur	0.38	0.40	0.50	0.41	0.57

Table 3.12: Mean Expenditure on items other than food (Rs)

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Mid term	8334	5650	14765	7736	20910

3.7.3 Income, Indebtedness and Capital Accumulation

Incomes of all households have been estimated from all sources after deducting all costs of earning the income. The sources include agriculture, animal husbandry, wage income within and outside household, hiring out of equipment, leasing out

land, orchards, selling wood, household industry, retail shops, traditional *yachaks*, and public programmes. The increase in incomes of the BPL in DPIP households is significantly large: it was less than those of Other BPL and BPL in Control Villages at the time of the Base Line Survey; and is now higher. The shift in relative position of the BPL in DPIP households in the income hierarchy reflects the success of the programme. Besides, the direct income accrual from the Sub Project Activities (SPAs) contributes only 12 per cent of the total income of the BPL in DPIP households, which shows that the DPIP has generated externalities responsible for increased incomes for the poor households. This may also be true for the APL households. See Table 3.13.

The improvement of the financial status is also reflected in acquiring new assets between the two surveys. Compared to the other BPL and Control BPL households, the BPL in DPIP have acquired more assets (Table 3.15). They have also acquired more debt, which reflects their improved credit worthiness than increase in vulnerability, especially when the rains have been more (Table 3.14).

Table 3.13: Nominal Incomes

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Base Line Drought Year Mean household income	18370	18987	55222	20884	67096
Base Line Normal Year Mean household income	23765	22920	74277	26154	93280
Mid term Mean household income	28671	22374	68331	23470	77484
Base Line Drought Year Per Capita income	3314	3892	8822	4022	11465
Base Line Normal Year Per capita Income	4288	4698	11866	5037	15940
Mid term Per capita Income	5133	4710	10910	4520	13059

Table 3.14: Change in Indebtedness

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Base Line mean Amount Outstanding	18954	9509	17447	20401	38425
N	63	32	56	90	12
Mid Term mean amount outstanding	22215	15563	44158	23179	54098
N	91	30	69	144	46

Table 3.15: Change in assets since the last survey (Rs)

Assets		Project Villages			Control Villages	
		BPL in DPIP	Other BPL	APL	BPL	APL
Kuchacha rooms	Mean	6531	4800	10858	6808	8833
	Per cent	10.3	7.3	6.7	14.3	9.2
Pucca rooms	Mean	30650	33333	38308	23867	42574

	Per cent	7.1	2.4	9.1	13.5	17.3
Toilet	Mean	6167	2000	4667	4143	4864
	Per cent	2.1	0.8	1.1	1.9	5.6
Animal shed	Mean	1976	2100	2309	2202	3282
	Per cent	7.4	5.6	7.7	12.4	22.4
Electric connection	Mean	1057	0	2000	1125	1489
	Per cent	2.5	0.8	7.4	1.1	4.6
Fan/ Cooler	Mean	263	467	936	711	1150
	Per cent	1.4	2.4	4.9	2.5	9.7
Almirah	Mean	1200	.	2356	2000	3450
	Per cent	0.4	0.0	2.8	0.8	5.1
Cooking gas	Mean	.	.	2000	2500	2667
	Per cent	0.0	0.0	1.4	0.3	1.5
Telephone	Mean	.	.	3100	750	2375
	Per cent	0.0	0.0	1.8	0.5	2.0
Radio	Mean	430	481	676	569	650
	Per cent	8.2	10.5	8.8	6.6	8.2
TV	Mean	2250	1	4339	2654	3717
	Per cent	1.4	0.8	8.1	3.6	11.7
Refrigerator	Mean	.	.	7000	.	.
	Per cent	0.0	0.0	0.4	0.0	0.0
Watch	Mean	325	281	495	271	542
	Per cent	11.7	12.1	10.2	12.1	13.3
Bicycle	Mean	643	1044	2645	1042	1432
	Per cent	9.9	6.5	10.2	7.1	9.7
Motor cycle/ scooter	Mean	24750	9500	33911	5000	33357
	Per cent	1.4	0.8	6.3	0.3	7.1
Jeep/ Car/ Jugad	Mean	.	.	56667	.	.
	Per cent	0.0	0.0	1.1	0.0	0.0
Tape recorder	Mean	633	-1200	1160	867	2333
	Per cent	1.1	0.8	1.8	1.6	1.5
Sewing machine	Mean	1500	.	1300	1667	1783
	Per cent	1.1	0.0	1.4	0.8	1.5
Tractor & Implements	Mean	650	400	110715	83533	46653
	Per cent	0.4	0.8	4.6	0.8	7.7
Agriculture implements	Mean	1300	896	2500	439	1274
	Per cent	23.8	16.9	23.9	22.5	30.1
Cart	Mean	300	.	11500	3313	5750
	Per cent	0.7	0.0	0.7	2.2	1.0
Disel/ Electric Pumpset	Mean	7800	.	11818	17988	39500
	Per cent	2.1	0.0	3.9	1.6	4.1
Sprinkler/ Drip	Mean	11904	3500	.	4250	13625
	Per cent	2.1	0.8	0.0	0.5	1.0
Chaff cutter	Mean	1900	.	1450	1275	2644
	Per cent	1.1	0.0	1.4	1.1	4.6

3.7.4 Vulnerability: Public programmes

One of the major programmes that reduced the vulnerability of the poor households was the earnings from famine relief works. It made available cash and grain when it was needed the most by the households: their contribution to total income varied between 7 to 14 per cent among the BPL households participating in the relief works. The drawls from public distribution system were made by less than 12 per cent BPL households. Mainly because the dealers never informed of the availability of grain to the households, the households complained.

Table 3.16: Per cent participation in famine relief works and the Public distribution system

	Project Villages			Control Villages	
	BPL in DPIP	Other BPL	APL	BPL	APL
Base Line	11.9	15.1	3.6	23.8	3.2
Mid Term	65.6	59.3	24.2	64.2	33.3
Earnings from famine relief work as per cent of total income of households who participated in the works	8.4	10.6	5.1	11.2	5.0
Mid term: Participation in the Public Distribution system	6.7	8.9	0.7	13.5	0.0

3.8 Field investigator's assessment

Field Investigator's made independent assessment of the overall situation of the households and reported an overwhelming proportion of BPL in DPIP improving their livelihood status. See Table 3.17.

Table 3.17: Investigator's assessment of changes in livelihood status in the last two years (per cent households)

	Project Villages			Control Villages	
Livelihood status	BPL in DPIP	Other BPL	APL	BPL	APL
Declined	16.3	23.4	16.8	26.4	24.6
Remained same	16.7	29.0	26.7	33.5	22.6
Improved	67.0	47.6	56.5	40.1	52.8

Chapter IV: Recommendations

This report is a Mid Term Impact assessment of the DPIP being implemented in seven districts of Rajasthan the report makes an assessment of economic returns and social benefits from various Sub Project Activities. The report also makes a comparison of changes in a select number of economic and social indicators of the sample households for which base line data was already available. The main findings and recommendations are summarised below:

1. Encroachment of common lands is a major problem in all DPIP districts. While the CIGs can be instrumental in removing the encroachments, the responsibility is of the entire village. We have seen that infrastructural works benefit the entire village and therefore it is recommended that investment in village infrastructure should become conditional to the village removing encroachment on forest and other common lands. The DPIP has done precious little for developing the common lands. A number of interventions can be planned on the commons including water harvesting structures and developing the pasturelands and the forests.
2. In the manufacturing sector, the scale of micro-enterprises can be of a higher order using new design and technology: presently, the investment is very low. The DPIP also provides an opportunity to set up a network of enterprises with an integrated marketing approach.
3. Mid Term assessment finds that the economic returns and social benefits per rupee of investment are very high. The externalities generated of an infrastructure work are found to improve access to markets, increased wages and access to social infrastructure by the villagers. On the other hand, there is inward transfer of resources and services to the village, such as more frequent visits of health workers, vendors and so on. It is recommended that all villages in DPIP may, if necessary, have infrastructure projects that are implemented by the panchayats. It is also recommended that CIGs may not be assigned these works for reasons mentioned in Process Monitoring Reports, submitted by the Institute of Development Studies, Jaipur, earlier.
4. A household perceives that ensuring returns from land based activities on land owned by them are the most sustainable livelihood intervention. Such interventions provide economic and hence social security, dignity and self-esteem, as well as reduce the vulnerability considerably. It is recommended that the Integrated Agriculture Development Programme undertaken by DPIP may be extended to all districts, with suitable modifications according to local conditions.
5. The impact on households directly benefiting from the DPIP activities has been measured by taking several indicators. Some of the important indicators are increase in irrigated area, increase in the number of livestock owned, increase in yield of milk, increased enrolment of children in school, proportional increase in income of BPL households greater than the proportional increase in incomes of APL households, increase in nominal per capita incomes. On most of these Indicators, we find that the status of BPL in DPIP has improved from the past and also relative to other households within Project and Control Villages.

Table A1: District wise change in mean household size

District		Project villages			Control villages	
		BPL Benefited from DPIP	BPL not benefited from DPIP	APL	BPL not benefited from DPIP	APL
Baran	Base Line	6.4	4.2	6.1	5.3	5.1
	Mid Term	6.9	4.3	6.5	5.4	5.1
	Percent change in households' population	7.5	3.8	6.6	3.3	-0.7
Churu	Base Line	5.3	6.0	6.9	4.9	5.8
	Mid Term	5.4	1.0	6.9	5.2	8.7
	Percent change in households' population	2.7	-83.3	11.3	5.5	50.0
Dausa	Base Line	5.9	5.3	7.4	5.5	6.0
	Mid Term	6.4	5.6	7.9	5.5	6.3
	Percent change in households' population	8.3	5.8	1.3	-1.4	5.4
Dholpur	Base Line	5.7	3.8	6.7	5.5	5.6
	Mid Term	6.0	4.0	7.0	5.7	5.8
	Percent change in households' population	5.5	5.3	3.8	4.9	3.8
Jhalawar	Base Line	5.1	4.9	5.2	5.1	7.0
	Mid Term	5.2	5.1	5.4	5.1	6.4
	Percent change in households' population	2.1	4.3	4.5	-0.8	-9.2
Rajsamand	Base Line	5.3	5.0	5.8	5.2	5.4
	Mid Term	5.8	4.9	6.0	5.4	5.9
	Percent change in households' population	8.9	-2.9	4.3	4.4	4.6
Tonk	Base Line	5.2	5.5	5.9	5.0	6.6
	Mid Term	5.6	5.7	6.1	5.1	6.9
	Percent change in households' population	7.2	4.8	4.2	2.3	4.9

Table A2: District wise distribution of ownership and yield of milching cattle

District			Base Line				Mid Term		
			Mean	Valid N	Mean yield DY	Mean Yield NY	Mean	Valid N	Mean Yield
Baran	Project	BPL Benefited	0.3	6	75	327	1.0	8	538
		BPL not benefited	0.8	18	507	484	1.2	10	582
		APL	1.6	34	491	737	1.8	19	704
	Control	BPL not benefited	1.2	11	225	429	1.2	5	810
		APL	1.3	10	308	508	1.4	10	738
Churu	Project	BPL Benefited	0.8	6	492	657	1.0	5	462
		BPL not benefited	.	0	.	.	.	0	.
		APL	1.0	3	1093	1048	1.0	3	793
	Control	BPL not benefited	1.2	5	466	665	1.0	17	1118
		APL	1.2	6	578	688	1.2	6	1078
Dausa	Project	BPL Benefited	1.0	6	148	178	1.0	9	560
		BPL not benefited	1.0	1	8	90	1.0	5	468
		APL	1.2	5	119	146	1.1	15	653
	Control	BPL not benefited	1.1	9	840	823	1.5	6	585
		APL	1.0	11	435	585	1.3	3	623
Dholpur	Project	BPL Benefited	1.0	4	353	413	1.0	1	420
		BPL not benefited	1.3	3	315	533	1.0	1	420
		APL	1.0	5	1002	1032	1.0	2	690
	Control	BPL not benefited	1.0	5	622	713	1.0	3	703
		APL	1.0	6	697	933	.	0	.
Jhalawar	Project	BPL Benefited	1.0	5	128	176	1.0	5	456
		BPL not benefited	1.0	2	100	303	1.0	1	600
		APL	1.1	11	167	274	1.0	7	456
	Control	BPL not benefited	1.1	20	134	167	1.0	4	375
		APL	2.1	17	304	404	2.0	12	1050
Rajasamand	Project	BPL Benefited	1.0	11	329	380	1.1	10	536
		BPL not benefited	1.3	4	208	393	1.0	8	540
		APL	1.4	18	608	684	1.4	19	701
	Control	BPL not benefited	1.1	16	444	501	1.0	8	518
		APL	1.1	10	507	552	1.1	12	642
Tonk	Project	BPL Benefited	1.0	11	433	524	1.1	17	804
		BPL not benefited	1.1	7	340	390	1.0	7	603
		APL	1.1	18	481	520	1.1	16	717
	Control	BPL not benefited	1.2	17	657	766	1.2	20	972
		APL	1.2	13	603	676	1.7	14	1400

Note: DY – Drought year
NY – Normal year
N – Number of households

Table A3: District wise distribution of ownership and yield of buffaloes

District			Base Line				Mid Term		
			Mean	Valid N	Mean yield DY	Mean Yield NY	Mean	Valid N	Mean Yield
Baran	Project	BPL Benefited	0.0	6	0	0	.		.
		BPL not benefited	0.1	15	80	107	1.0		1260
		APL	0.8	26	690	1012	1.8		1459
	Control	BPL not benefited	1.0	4	455	603	1.0		1266
		APL	1.5	13	424	720	2.1		2447
Churu	Project	BPL Benefited	.	0	.	.	.		.
		BPL not benefited	.	0	.	.	.		.
		APL	1.0	7	969	1191	1.0		996
	Control	BPL not benefited	1.0	12	1063	1248	1.0		1361
		APL	1.0	15	1092	1374	1.0		1778
Dausa	Project	BPL Benefited	1.0	24	733	715	1.1		1311
		BPL not benefited	1.0	10	720	934	1.0		1120
		APL	1.7	31	1433	2070	1.3		1604
	Control	BPL not benefited	1.2	19	1397	1716	1.0		826
		APL	1.5	17	1450	1885	1.4		1601
Dholpur	Project	BPL Benefited	1.1	33	1097	1354	1.1		1131
		BPL not benefited	1.1	10	1232	1474	1.0		806
		APL	1.5	62	1776	2061	1.4		1389
	Control	BPL not benefited	1.1	31	1211	1447	1.1		1002
		APL	1.5	25	2059	2470	1.4		1520
Jhalawar	Project	BPL Benefited	1.0	3	650	3633	1.0		815
		BPL not benefited	1.0	1	250	300	.		.
		APL	1.1	17	439	766	1.2		900
	Control	BPL not benefited	1.0	2	300	390	1.0		795
		APL	1.8	16	926	981	1.8		2224
Rajasamand	Project	BPL Benefited	1.0	5	556	678	1.3		913
		BPL not benefited	1.0	2	1110	1175	1.0		812
		APL	1.3	21	920	957	1.3		1049
	Control	BPL not benefited	1.0	9	487	582	1.4		1075
		APL	1.2	13	1279	1348	1.1		795
Tonk	Project	BPL Benefited	1.1	13	841	926	1.5		1650
		BPL not benefited	1.2	5	1352	1475	1.2		1715
		APL	1.3	31	1296	1450	1.5		1735
	Control	BPL not benefited	1.3	12	1342	1454	1.3		1837
		APL	1.3	21	1665	1816	1.8		2766

Note: DY – Drought year
NY – Normal year
N – Number of households

Table A4: District wise distribution of ownership of goat and sheep

District			Goat		Sheep		Goat		Sheep	
			Mean	Valid N	Mean	Valid N	Mean	Valid N	Mean	Valid N
Baran	Project	BPL Benefited	0.6	8	0.0	6	3.7	3	.	0
		BPL not benefited	0.2	15	0.0	15	.	0	.	0
		APL	0.7	18	0.0	16	1.0	1	.	0
	Control	BPL not benefited	1.3	11	0.0	1	2.7	12	.	0
		APL	0.0	1	0.0	1	1.7	3	.	0
Churu	Project	BPL Benefited	2.2	18	33.0	1	1.9	18	33.0	1
		BPL not benefited	2.0	1	.	0	1.0	1	.	0
		APL	2.1	7	.	0	2.0	4	.	0
	Control	BPL not benefited	2.4	30	49.5	4	1.6	22	25.3	3
		APL	1.9	12	16.7	3	2.2	9	42.0	1
Dausa	Project	BPL Benefited	0.5	35	.	0	1.7	10	1.0	1
		BPL not benefited	0.3	3	.	0	1.0	1	.	0
		APL	0.4	21	2.0	1	1.2	6	.	0
	Control	BPL not benefited	1.9	20	3.0	1	1.9	20	7.0	1
		APL	1.5	16	.	0	1.5	13	.	0
Dholpur	Project	BPL Benefited	0.7	11	.	0	2.0	1	.	0
		BPL not benefited	1.0	2	.	0	1.0	1	.	0
		APL	1.0	9	.	0	1.0	1	.	0
	Control	BPL not benefited	1.0	7	.	0	.	0	.	0
		APL	2.0	2	.	0	1.0	1	.	0
Jhalawar	Project	BPL Benefited	1.0	6	.	0	1.0	6	.	0
		BPL not benefited	1.5	2	.	0	1.0	2	.	0
		APL	1.3	9	.	0	1.6	9	.	0
	Control	BPL not benefited	1.8	12	.	0	1.6	13	.	0
		APL	3.8	4	.	0	2.3	4	.	0
Rajasamand	Project	BPL Benefited	1.7	39	15.0	1	1.6	33	16.5	2
		BPL not benefited	1.4	14	.	0	1.7	12	.	0
		APL	1.6	22	.	0	1.7	15	.	0
	Control	BPL not benefited	2.0	28	.	0	2.6	18	.	0
		APL	1.6	14	5.0	1	1.5	13	2.0	1
Tonk	Project	BPL Benefited	1.2	21	12.0	2	1.9	15	.	0
		BPL not benefited	1.8	12	3.0	2	1.6	10	5.0	1
		APL	0.9	18	.	0	2.3	9	.	0
	Control	BPL not benefited	1.6	25	15.0	1	2.3	16	.	0
		APL	4.0	10	46.3	4	2.8	6	45.0	2

Note: N – Number of households

Table A5: District wise change in irrigated land area

		Project villages			Control villages	
		BPL Benefited from DPIP	BPL not benefited from DPIP	APL	BPL not benefited from DPIP	APL
Baran						
Base Line	Mean	4.9	4.7	24.3	6.4	24.8
	Sum	48.5	14.0	560.0	58.0	620.0
	N	10.0	3.0	23.0	9.0	25.0
Mid Term	Mean	5.9	5.5	23.7	6.3	23.2
	Sum	58.5	22.0	545.0	50.0	463.5
	N	10.0	4.0	23.0	8.0	20.0
Change in mean irrigated area		20.6	17.9	-2.7	-3.0	-6.6
Percent change in number of households now possessing irrigated land		0.0	33.3	0.0	-11.1	-20.0
Churu						
Base Line	Mean	7.0	.	.	.	.
	Sum	7.0	.	.	.	.
	N	1.0	0.0	0.0	0.0	0.0
Mid Term	Mean	5.5	.	.	.	20.0
	Sum	11.0	.	.	.	20.0
	N	2.0	0.0	0.0	0.0	1.0
Change in mean irrigated area		-21.4				
Percent change in number of households now possessing irrigated land		100.0				
Dausa						
Base Line	Mean	.	.	.	.	.
	Sum	.	.	.	.	.
	N	0.0	0.0	0.0	0.0	0.0
Mid Term	Mean	2.7	3.3	8.3	2.3	4.7
	Sum	97.5	40.0	330.3	51.5	83.8
	N	36.0	12.0	40.0	22.0	18.0
Change in mean irrigated area						
Percent change in number of households now possessing irrigated land						
Dholpur						
Base Line	Mean	2.0	.	6.9	1.6	10.0
	Sum	23.5	.	384.5	8.0	220.5
	N	12.0	0.0	56.0	5.0	22.0
Mid Term	Mean	2.0	2.5	6.7	1.4	7.4
	Sum	61.3	20.0	403.5	34.0	177.0
	N	31.0	8.0	60.0	24.0	24.0
Change in mean irrigated area		0.9		-2.1	-11.5	-26.4
Percent change in number of households now possessing irrigated land		158.3		7.1	380.0	9.1

Table A5: District wise change in irrigated land area (Continued)

		Project villages			Control villages	
		BPL Benefited from DPIP	BPL not benefited from DPIP	APL	BPL not benefited from DPIP	APL
Jhalawar						
Base Line	Mean	4.4	6.0	11.1	7.3	22.7
	Sum	61.0	6.0	289.0	80.0	591.0
	N	14.0	1.0	26.0	11.0	26.0
Mid Term	Mean	4.8	6.0	10.0	4.9	23.8
	Sum	63.0	6.0	250.0	48.5	619.0
	N	13.0	1.0	25.0	10.0	26.0
Change in mean irrigated area		11.2	0.0	-10.0	-33.3	4.7
Percent change in number of households now possessing irrigated land		-7.1	0.0	-3.8	-9.1	0.0
Rajsamand						
Base Line	Mean	1.8	1.8	4.1	2.6	7.2
	Sum	34.5	22.0	126.5	87.0	188.0
	N	19.0	12.0	31.0	34.0	26.0
Mid Term	Mean	1.9	1.1	2.0	2.2	1.8
	Sum	28.5	4.5	26.5	28.5	11.0
	N	15.0	4.0	13.0	13.0	6.0
Change in mean irrigated area		4.6	-38.6	-50.0	-14.3	-74.6
Percent change in number of households now possessing irrigated land		-21.1	-66.7	-58.1	-61.8	-76.9
Tonk						
Base Line	Mean	2.6	3.4	7.9	2.4	7.3
	Sum	73.7	31.0	324.0	57.5	175.0
	N	28.0	9.0	41.0	24.0	24.0
Mid Term	Mean	2.7	3.7	7.8	2.4	7.7
	Sum	83.7	37.0	320.0	63.5	185.0
	N	31.0	10.0	41.0	26.0	24.0
Change in mean irrigated area		2.6	7.4	-1.2	1.9	5.7
Percent change in number of households now possessing irrigated land		10.7	11.1	0.0	8.3	0.0

Table A6: District wise yields rates of major crops

District			Bajra			Maize			Jowar		
			DY	NY	Mid term	DY	NY	Mid term	DY	NY	Mid term
Baran	Project	BPL Benefited							0.1	1.0	1.8
		BPL not benefited							0.8	3.0	1.0
		APL				0.4	1.0		0.7	1.2	0.8
	Control	BPL not benefited						1.5			1.5
		APL	1.0	1.5		0.0	2.0	1.9	1.2	1.0	1.8
Churu	Project	BPL Benefited	0.2	1.2	1.4						1.0
		BPL not benefited	0.1	0.5	1.0						
		APL	0.2	1.1	1.4						
	Control	BPL not benefited	0.1	1.0	1.4						
		APL	0.1	1.1	0.9						
Dausa	Project	BPL Benefited	2.3	3.5	2.8			1.3	1.8	2.0	2.0
		BPL not benefited	1.1	2.5	2.5			1.0	0.7	3.3	
		APL	2.4	4.1	2.1	2.0	3.1	2.3	1.1	2.3	3.3
	Control	BPL not benefited	1.5	3.1	3.2	1.2	3.0	1.2	0.6	2.8	
		APL	2.0	3.4	3.4	1.7	3.8	2.2	0.0	1.0	2.0
Dholpur	Project	BPL Benefited	2.5	4.2	3.2		12.0				
		BPL not benefited	2.7	3.9	2.6						
		APL	2.2	3.3	2.8					1.0	
	Control	BPL not benefited	2.6	4.0	3.0						
		APL	1.9	3.8	3.4						
Jhalawar	Project	BPL Benefited	2.0	3.7		2.1	2.2	2.3			2.0
		BPL not benefited						2.0			
		APL	1.2	2.4		1.7	2.5	2.2	0.1		13.8
	Control	BPL not benefited				1.0	2.2	2.4		1.4	2.0
		APL				1.6	2.1	2.7	0.0	0.0	3.0
Rajasamand	Project	BPL Benefited	0.0	2.3	4.0	0.2	2.8	1.7		2.0	
		BPL not benefited				0.3	2.9	1.5			8.0
		APL		2.8		0.4	3.2	1.7			
	Control	BPL not benefited		3.0	1.0	0.2	2.8	1.1	0.5		
		APL			1.0	0.6	2.8	2.3	1.0	3.0	3.0
Tonk	Project	BPL Benefited	0.9	2.5	2.4	2.0	3.4	1.8	0.8	2.2	0.8
		BPL not benefited	1.3	3.1	2.4	1.3	2.2	2.5	1.0	5.2	2.7
		APL	1.5	3.0	2.9	1.7	3.2	2.3	1.4	2.7	1.1
	Control	BPL not benefited	1.1	2.9	2.9	0.9	3.2	2.0	1.1	3.0	1.6
		APL	1.8	3.8	3.2	1.1	3.0	2.3	1.5	2.7	1.6

Note: DY – Base Line Drought year
NY – Base Line Normal year

Table A6: District wise yields rates of major crops (Continued)

District			Kharif pulse			Groundnut			Soyabeen		
			DY	NY	Mid term	DY	NY	Mid term	DY	NY	Mid term
Baran	Project	BPL Benefited	0.3	1.0					1.7	1.8	1.9
		BPL not benefited							4.1	2.4	2.3
		APL							0.2	3.1	2.2
	Control	BPL not benefited				0.0	4.7		0.8	2.3	1.9
		APL				1.7	1.0		1.8	2.5	1.8
Churu	Project	BPL Benefited	12.2	0.5	11.2						
		BPL not benefited	10.0	0.3							
		APL	4.2	1.0	0.5						
	Control	BPL not benefited	8.6	0.7	6.3						
		APL	7.4	0.8	1.2						
Dausa	Project	BPL Benefited		3.0		2.3	2.5	2.6			
		BPL not benefited		2.0		3.0	3.0	2.0			
		APL	2.7	1.7		1.6	1.9	2.8			
	Control	BPL not benefited		2.0		2.2	3.6				
		APL				3.1	4.0				
Dholpur	Project	BPL Benefited	0.4	2.5							
		BPL not benefited		4.1							
		APL	0.7	3.0	2.4		1.3	2.5			
	Control	BPL not benefited									
		APL	0.3	3.9	2.0						
Jhalawar	Project	BPL Benefited			2.0				1.6	3.2	2.1
		BPL not benefited							1.5	2.0	
		APL	7.5	1.0	3.8	2.0	2.3	2.1	1.8	2.4	2.1
	Control	BPL not benefited						2.0	0.8	2.3	2.0
		APL	1.4	2.1	1.7	1.5	1.8	2.3	1.6	2.2	2.3
Rajasamand	Project	BPL Benefited		0.8							
		BPL not benefited		3.3							
		APL	1.6	2.5							
	Control	BPL not benefited	5.0	2.5	4.0	0.8	1.7				
		APL	1.1	2.4	0.7	3.0	3.4	1.0			
Tonk	Project	BPL Benefited	1.2	2.0	0.5	2.0	2.8				
		BPL not benefited	1.1	2.5	1.9	1.3	2.7				
		APL	1.0	2.1	0.6	1.3	2.4				
	Control	BPL not benefited	1.5	2.6	1.6						
		APL	1.3	2.5	1.7	1.4	3.8				2.3

Note: DY – Base Line Drought year
NY – Base Line Normal year

Table A6: District wise yields rates of major crops (Continued)

District			Gwar			Wheat			Barley		
			DY	NY	Mid term	DY	NY	Mid term	DY	NY	Mid term
Baran	Project	BPL Benefited				1.3	5.1			2.0	1.9
		BPL not benefited				1.6	8.0				2.3
		APL				1.2	7.2				2.2
	Control	BPL not benefited				1.4	3.8				1.9
		APL				1.1	4.8		1.2	3.9	1.8
Churu	Project	BPL Benefited	0.1	1.0	5.6						
		BPL not benefited				1.4					
		APL	0.2	0.8	1.0					0.2	
	Control	BPL not benefited	0.1	1.0	3.7	1.3			1.0		
		APL	0.2	1.0	1.3	1.3			1.0		
Dausa	Project	BPL Benefited	1.8	2.6	3.0	1.1	6.3		1.0	5.0	
		BPL not benefited	1.2	1.8		1.3	5.8		1.3	4.0	
		APL	1.5	2.0	2.4	1.3	6.5		1.5	3.7	
	Control	BPL not benefited	0.6	2.8		1.3	5.2			5.8	
		APL	1.0	2.4		1.3	5.0			4.0	
Dholpur	Project	BPL Benefited	1.8	3.7	0.4	1.3	7.9				
		BPL not benefited	2.2	2.8	2.8	1.3	8.4				
		APL	2.1	3.1		1.1	6.5			4.8	
	Control	BPL not benefited	2.0	4.0		1.3	9.8				
		APL	2.5	3.6		1.3	8.6				
Jhalawar	Project	BPL Benefited				1.2	5.0				2.1
		BPL not benefited				1.9	5.8				
		APL				1.3	5.2				2.1
	Control	BPL not benefited				1.3	4.4				2.0
		APL				1.0	5.5				2.3
Rajasamand	Project	BPL Benefited	0.3	1.8	0.4	1.1	0.0			3.0	
		BPL not benefited		3.5	1.0	1.3	0.0		0.9		
		APL	0.6	3.0	1.1	1.1	0.0		1.0	3.0	
	Control	BPL not benefited	0.3	2.1		1.2	4.5			2.9	
		APL	0.4	2.2	1.2	1.3	3.9			4.3	
Tonk	Project	BPL Benefited	0.6	2.0		1.1	4.8		1.2	4.0	
		BPL not benefited	0.8	3.6	3.0	1.6	4.9		1.4		
		APL	1.1	2.6	2.3	1.2	4.5		1.4	2.2	
	Control	BPL not benefited	0.6	2.2	2.8		4.4			3.7	
		APL	0.8	2.7	2.0		4.2			3.8	2.3

Note: DY – Base Line Drought year
NY – Base Line Normal year

Table A6: District wise yields rates of major crops (Continued)

District			Rabi pulses			Rabi oilseeds		
			DY	NY	Mid term	DY	NY	Mid term
Baran	Project	BPL Benefited					0.1	1.0
		BPL not benefited					1.4	2.5
		APL		1.9	3.6	2.0	1.9	2.1
	Control	BPL not benefited			1.3		1.4	2.8
		APL					2.2	2.9
Churu	Project	BPL Benefited		0.2	1.3			
		BPL not benefited		0.0				
		APL		0.2	0.8			
	Control	BPL not benefited			1.0		2.3	
		APL		1.0	1.0		1.2	
Dausa	Project	BPL Benefited	6.0	1.8		1.6	3.2	1.7
		BPL not benefited		2.1	1.5		0.0	1.5
		APL	3.6	1.3	2.3	3.0	2.9	3.0
	Control	BPL not benefited	0.1	5.0	3.5		2.5	3.3
		APL	0.4	3.4	2.0		3.6	1.9
Dholpur	Project	BPL Benefited		2.7	3.5	0.5	2.6	3.9
		BPL not benefited		4.0	3.5		2.4	3.5
		APL		1.5	3.5	3.0	2.5	3.8
	Control	BPL not benefited			5.0	3.2		3.5
		APL	8.0		3.4	3.1		3.8
Jhalawar	Project	BPL Benefited				4.0		
		BPL not benefited					1.8	
		APL		1.2	2.0	2.8	1.7	2.0
	Control	BPL not benefited						0.2
		APL	2.0		1.6			2.2
Rajasamand	Project	BPL Benefited		1.0				
		BPL not benefited		0.1				
		APL		3.3	1.9		3.0	
	Control	BPL not benefited		2.0	2.1		2.8	4.3
		APL			3.0		1.2	3.5
Tonk	Project	BPL Benefited		0.9	3.1		1.7	3.7
		BPL not benefited		1.0			0.9	3.4
		APL	3.0	1.2	2.1	1.0	1.4	2.6
	Control	BPL not benefited	3.3		2.9			2.2
		APL	3.7		3.1	3.0		2.8

Note: DY – Base Line Drought year
NY – Base Line Normal year

Table A7: Per cent households availing loan facility

District			Base Line	Mid term
Baran	Project	BPL Benefited	23.8	9.5
		BPL not benefited	48.0	4.0
		APL	5.7	22.9
	Control	BPL not benefited	13.5	11.5
		APL	0.0	39.3
Churu	Project	BPL Benefited	19.0	9.5
		BPL not benefited		0.0
		APL	40.0	40.0
	Control	BPL not benefited	7.7	15.4
		APL	14.3	0.0
Dausa	Project	BPL Benefited	0.0	9.8
		BPL not benefited	42.9	7.1
		APL	25.6	9.3
	Control	BPL not benefited	5.8	9.6
		APL	17.9	3.6
Dholpur	Project	BPL Benefited	1.6	12.7
		BPL not benefited	50.0	0.0
		APL	15.7	15.7
	Control	BPL not benefited	0.0	23.1
		APL	0.0	17.9
Jhalawar	Project	BPL Benefited	10.7	14.3
		BPL not benefited	38.5	0.0
		APL	5.9	8.8
	Control	BPL not benefited	13.5	3.8
		APL	32.1	10.7
Rajasamand	Project	BPL Benefited	1.8	9.1
		BPL not benefited	28.6	0.0
		APL	29.5	9.1
	Control	BPL not benefited	7.7	5.8
		APL	14.3	7.1
Tonk	Project	BPL Benefited	9.3	14.0
		BPL not benefited	39.1	13.0
		APL	16.3	24.5
	Control	BPL not benefited	7.7	11.5
		APL	0.0	10.7

Table A8: Per cent children presently going to school

District			Age group 6-11(at the time of base line)		Age group 12-14 (at the time of base line)	
			Boys	Girls	Boys	Girls
Baran	Project	BPL Benefited	74	85	40	
		BPL not benefited	63	100	14	
		APL	82	75	50	
	Control	BPL not benefited	76	69	89	58
		APL	73	86	80	50
Churu	Project	BPL Benefited	82	67	67	50
		BPL not benefited	100	100		
		APL	80	50	33	100
	Control	BPL not benefited	95	92	50	33
		APL	100	100	100	67
Dausa	Project	BPL Benefited	86	67	100	50
		BPL not benefited	86	80	67	
		APL	85	74	89	9
	Control	BPL not benefited	81	32	70	13
		APL	93	100	71	100
Dholpur	Project	BPL Benefited	95	78	50	40
		BPL not benefited	78	100	50	100
		APL	92	82	66	56
	Control	BPL not benefited	80	48	33	33
		APL	94	87	83	67
Jhalawar	Project	BPL Benefited	47	36	33	
		BPL not benefited	45	33	67	50
		APL	78	22	67	25
	Control	BPL not benefited	83	74	44	38
		APL	86	73	89	33
Rajasamand	Project	BPL Benefited	78	76	40	29
		BPL not benefited	40	54		33
		APL	90	73	54	63
	Control	BPL not benefited	83	62	50	25
		APL	94	93	100	71
Tonk	Project	BPL Benefited	86	69	77	
		BPL not benefited	78	83	60	40
		APL	92	47	92	43
	Control	BPL not benefited	17	24	20	
		APL	17	11	33	

Table A9: Mean expenditure incurred per annum on education

District			Boys		Girls	
			Expenditure	N	Expenditure	N
Baran	Project	BPL Benefited	328	16	255	10
		BPL not benefited	417	6	350	8
		APL	1217	21	525	12
	Control	BPL not benefited	762	30	309	27
		APL	1953	17	1113	8
Churu	Project	BPL Benefited	777	13	523	13
		BPL not benefited	500	2	500	1
		APL	2720	5	670	5
	Control	BPL not benefited	1196	27	785	13
		APL	1640	10	850	7
Dausa	Project	BPL Benefited	967	36	491	22
		BPL not benefited	1286	7	425	8
		APL	735	31	524	17
	Control	BPL not benefited	576	34	386	11
		APL	1280	20	823	20
Dholpur	Project	BPL Benefited	575	50	596	38
		BPL not benefited	688	8	750	4
		APL	1198	64	797	41
	Control	BPL not benefited	656	35	681	16
		APL	1310	20	864	15
Jhalawar	Project	BPL Benefited	478	9	320	5
		BPL not benefited	257	7	250	4
		APL	616	19	433	3
	Control	BPL not benefited	511	32	493	20
		APL	1277	26	813	15
Rajasamand	Project	BPL Benefited	398	27	503	18
		BPL not benefited	425	4	394	8
		APL	824	25	731	13
	Control	BPL not benefited	673	20	529	14
		APL	906	18	671	19
Tonk	Project	BPL Benefited	972	28	801	11
		BPL not benefited	780	10	807	7
		APL	1458	34	855	10
	Control	BPL not benefited	1121	7	429	7
		APL	1271	7	300	2

Note: N – Number of households

Table A10: Mean Grain consumption per capita per month

District			N	Base Line	Mid term
Baran	Project	BPL Benefited	21	13.8	15.1
		BPL not benefited	25	14.6	16.1
		APL	35	17.1	16.3
	Control	BPL not benefited	52	14.2	15.1
		APL	28	17.4	14.8
Churu	Project	BPL Benefited	21	15.8	14.3
		BPL not benefited	1	17.0	12.5
		APL	10	20.4	16.6
	Control	BPL not benefited	52	14.1	15.2
		APL	28	17.4	16.1
Dausa	Project	BPL Benefited	51	16.1	12.0
		BPL not benefited	14	12.1	15.3
		APL	43	15.1	14.2
	Control	BPL not benefited	52	13.8	13.1
		APL	28	19.1	15.5
Dholpur	Project	BPL Benefited	63	12.2	13.9
		BPL not benefited	20	15.0	14.6
		APL	70	14.9	14.3
	Control	BPL not benefited	52	13.5	13.3
		APL	28	14.4	17.6
Jhalawar	Project	BPL Benefited	28	15.9	13.9
		BPL not benefited	13	13.3	13.2
		APL	34	16.4	17.4
	Control	BPL not benefited	52	14.8	14.0
		APL	28	19.2	13.9
Rajasamand	Project	BPL Benefited	55	13.9	13.5
		BPL not benefited	28	16.1	12.6
		APL	44	15.0	13.7
	Control	BPL not benefited	52	16.3	13.9
		APL	28	15.1	15.3
Tonk	Project	BPL Benefited	43	20.0	15.3
		BPL not benefited	23	14.3	14.2
		APL	49	16.1	15.8
	Control	BPL not benefited	52	15.6	15.7
		APL	28	14.8	17.9

Note: N – Number of households.

Table A11: Consumption of important items per capita per month

District			N	Pulses		Vegetable oil		Milk		Curd	
				Base Line	Mid term	Base Line	Mid term	Base Line	Mid term	Base Line	Mid term
Baran	Project	BPL Benefited	21	0.13	0.31	0.25	0.26	0.67	3.49	0.00	0.82
		BPL not benefited	25	0.33	0.47	0.35	0.37	3.22	4.88	0.13	1.35
		APL	35	0.55	0.46	0.45	0.35	7.61	9.57	1.04	3.40
	Control	BPL not benefited	52	0.26	0.23	0.29	0.35	2.43	4.93	0.28	0.73
		APL	28	0.49	0.42	0.46	0.55	4.72	7.38	0.96	2.55
Churu	Project	BPL Benefited	21	0.38	0.29	0.28	0.34	7.30	6.81	0.14	0.81
		BPL not benefited	1	0.33	0.50	0.33	0.33	5.00	5.00	0.00	0.00
		APL	10	0.45	0.35	0.62	0.54	10.48	8.71	1.77	2.42
	Control	BPL not benefited	52	0.28	0.55	0.32	0.35	6.69	8.84	0.00	2.33
		APL	28	0.43	0.56	0.44	0.30	8.73	11.94	0.09	3.40
Dausa	Project	BPL Benefited	51	0.40	0.30	0.33	0.35	9.11	6.23	1.10	2.00
		BPL not benefited	14	0.21	0.38	0.25	0.35	7.85	6.99	0.41	1.16
		APL	43	0.40	0.37	0.32	0.81	10.58	7.82	1.99	3.56
	Control	BPL not benefited	52	0.31	0.18	0.33	0.28	7.85	5.87	0.69	0.76
		APL	28	0.49	0.39	0.48	0.38	13.53	9.31	0.66	2.15
Dholpur	Project	BPL Benefited	63	0.30	0.21	0.29	0.24	5.92	3.79	0.06	0.54
		BPL not benefited	20	0.47	0.23	0.35	0.23	6.49	5.80	0.00	0.63
		APL	70	0.51	0.30	0.41	0.42	8.23	6.74	0.36	1.79
	Control	BPL not benefited	52	0.43	0.24	0.39	2.06	8.42	4.37	0.00	0.92
		APL	28	0.46	0.38	0.47	0.46	12.82	8.35	0.00	1.89
Jhalawar	Project	BPL Benefited	28	0.42	0.38	0.33	0.33	3.54	4.86	0.00	1.06
		BPL not benefited	13	0.25	0.24	0.23	0.26	0.92	2.71	0.00	0.87
		APL	34	0.40	0.26	0.39	0.31	5.62	5.83	0.24	2.63
	Control	BPL not benefited	52	0.43	0.27	0.32	0.28	3.03	5.03	0.19	0.21
		APL	28	0.66	0.31	0.50	0.31	8.02	7.08	1.14	1.97
Rajasamand	Project	BPL Benefited	55	0.27	0.31	0.47	0.37	5.36	7.59	0.80	0.85
		BPL not benefited	28	0.36	0.25	0.40	0.35	6.04	7.43	0.44	1.04
		APL	44	0.37	0.34	0.54	0.56	11.98	12.13	3.14	2.09
	Control	BPL not benefited	52	0.34	0.18	0.37	0.36	4.35	8.09	0.96	1.30
		APL	28	0.47	0.46	0.55	0.50	7.80	10.56	2.80	1.36
Tonk	Project	BPL Benefited	43	0.34	0.30	0.39	0.35	5.66	6.65	1.10	2.26
		BPL not benefited	23	0.31	0.24	0.34	0.27	6.03	5.39	1.11	1.90
		APL	49	0.45	0.42	0.62	0.43	8.66	8.21	1.46	3.42
	Control	BPL not benefited	52	0.36	0.26	0.42	0.34	6.43	6.36	1.65	2.23
		APL	28	0.48	0.45	0.54	0.39	8.65	8.76	3.27	5.78

Note: N – Number of households.

Table A12: Consumption of important items per capita per month (Continued)

District			N	Pure Ghee		Sugar		Gur	
				Base Line	Mid term	Base Line	Mid term	Base Line	Mid term
Baran	Project	BPL Benefited	21	0.01	0.07	0.14	0.47	0.05	0.22
		BPL not benefited	25	0.10	0.15	0.62	0.67	0.23	0.46
		APL	35	0.21	0.27	0.96	0.69	0.24	0.48
	Control	BPL not benefited	52	0.06	0.08	0.39	0.69	0.00	0.04
		APL	28	0.22	0.24	1.36	0.95	0.04	0.17
Churu	Project	BPL Benefited	21	0.10	0.05	1.10	0.95	0.20	0.56
		BPL not benefited	1	0.17	0.17	1.33	1.67	0.00	0.00
		APL	10	0.24	0.23	1.74	0.92	0.23	0.29
	Control	BPL not benefited	52	0.14	0.35	1.42	0.75	0.10	0.36
		APL	28	0.28	0.41	1.56	0.78	0.07	0.40
Dausa	Project	BPL Benefited	51	0.29	0.17	0.76	0.52	0.28	0.33
		BPL not benefited	14	0.14	0.22	0.46	0.61	0.26	0.61
		APL	43	0.25	0.24	0.77	0.61	0.65	0.48
	Control	BPL not benefited	52	0.36	0.11	0.87	0.64	0.23	0.35
		APL	28	0.38	0.31	1.04	0.87	0.47	0.51
Dholpur	Project	BPL Benefited	63	0.11	0.09	0.67	0.44	0.03	0.47
		BPL not benefited	20	0.14	0.13	1.07	0.41	0.05	0.48
		APL	70	0.29	0.31	0.97	0.54	0.05	0.78
	Control	BPL not benefited	52	0.22	1.85	0.79	0.53	0.02	0.66
		APL	28	0.46	0.27	0.84	0.75	0.02	1.83
Jhalawar	Project	BPL Benefited	28	0.06	0.10	0.49	0.45	0.00	0.22
		BPL not benefited	13	0.02	0.04	0.38	0.38	0.00	0.17
		APL	34	0.19	0.17	0.71	0.50	0.00	0.20
	Control	BPL not benefited	52	0.03	0.07	0.64	0.72	0.08	0.56
		APL	28	0.25	0.23	1.19	0.78	0.02	0.57
Rajasamand	Project	BPL Benefited	55	0.13	0.12	1.12	0.92	0.17	0.48
		BPL not benefited	28	0.15	0.10	1.15	0.84	0.24	0.50
		APL	44	0.32	0.29	1.09	1.03	0.25	0.42
	Control	BPL not benefited	52	0.21	0.13	0.85	0.82	0.07	0.61
		APL	28	0.30	0.35	1.08	1.08	0.07	0.24
Tonk	Project	BPL Benefited	43	0.16	0.16	0.89	0.63	0.15	0.26
		BPL not benefited	23	0.16	0.13	0.86	0.52	0.15	0.25
		APL	49	0.29	0.37	1.00	0.72	0.19	0.39
	Control	BPL not benefited	52	0.15	0.12	0.83	0.61	0.07	0.24
		APL	28	0.28	0.35	0.93	0.85	0.12	0.31

Note: N – Number of households.

Table A13: Changes in Income and per capita income

District			Number of households	Mean household income			Per capita income		
				DY	NY	Mid Term	DY	NY	Mid Term
Baran	Project	BPL Benefited	21	17035	22190	30276	2670	3478	4745
		BPL not benefited	25	18542	22194	21518	4457	5335	5173
		APL	35	45522	84401	88033	7480	13869	14466
	Control	BPL not benefited	52	16088	18662	18317	3053	3542	3476
		APL	28	61675	65629	62142	12424	13220	12071
Churu	Project	BPL Benefited	21	16018	21225	23565	3030	4015	4458
		BPL not benefited	1	39400	43400	46200	6567	7233	7700
		APL	10	44564	59058	42301	7188	9525	6823
	Control	BPL not benefited	52	18400	28872	26020	3752	5888	5306
		APL	28	68076	111236	93495	11766	19226	16160
Dausa	Project	BPL Benefited	51	13444	18958	30022	2286	3223	5104
		BPL not benefited	14	12679	14571	27690	2572	2957	5217
		APL	43	32757	36550	54914	4416	4927	7402
	Control	BPL not benefited	52	15655	19098	14566	2846	3472	2648
		APL	28	52375	58868	60495	8781	9870	10143
Dholpur	Project	BPL Benefited	63	21335	28303	29275	3723	4939	4947
		BPL not benefited	20	20175	23723	21840	5380	6326	5824
		APL	70	68618	87493	77381	10176	12976	11476
	Control	BPL not benefited	52	21731	25622	24136	3979	4691	4419
		APL	28	58021	84782	65002	10414	15217	11667
Jhalawar	Project	BPL Benefited	28	18615	23279	30843	3670	4590	6082
		BPL not benefited	13	14631	17027	16323	2757	3208	3312
		APL	34	34154	46182	43842	6561	8871	8422
	Control	BPL not benefited	52	20793	19815	22660	4111	3918	4480
		APL	28	81877	114203	110871	11697	16315	15839
Rajasamand	Project	BPL Benefited	55	21681	25262	22649	4070	4742	4251
		BPL not benefited	28	18302	21743	18719	3660	4349	3744
		APL	44	65198	84043	65705	11294	14559	11382
	Control	BPL not benefited	52	34557	43020	31893	6655	8285	6142
		APL	28	83860	116007	69620	15448	21370	12825
Tonk	Project	BPL Benefited	43	17275	23227	34208	3331	4479	6596
		BPL not benefited	23	24688	31969	27860	4507	5836	5086
		APL	49	70564	95102	77767	12006	16181	13231
	Control	BPL not benefited	52	18963	27985	26697	3822	5640	5381
		APL	28	63791	102234	80217	9655	15473	12141

Note: DY – Base Line Drought year
NY – Base Line Normal year

Table A14: Per cent households participating in famine relief works

District			Base Line	Mid term
Baran	Project	BPL Benefited	0.0	85.7
		BPL not benefited	0.0	68.0
		APL	0.0	40.0
	Control	BPL not benefited	2.0	66.7
		APL	0.0	56.5
Churu	Project	BPL Benefited	0.0	71.4
		BPL not benefited	0.0	100.0
		APL	0.0	40.0
	Control	BPL not benefited	6.1	51.9
		APL	0.0	7.1
Dausa	Project	BPL Benefited	8.5	66.7
		BPL not benefited	16.7	69.2
		APL	0.0	39.5
	Control	BPL not benefited	2.0	38.5
		APL	3.7	14.3
Dholpur	Project	BPL Benefited	0.0	15.9
		BPL not benefited	0.0	5.3
		APL	0.0	1.4
	Control	BPL not benefited	0.0	3.2
		APL	0.0	0.0
Jhalawar	Project	BPL Benefited	0.0	78.6
		BPL not benefited	0.0	71.4
		APL	0.0	41.2
	Control	BPL not benefited	4.0	92.3
		APL	0.0	53.6
Rajasamand	Project	BPL Benefited	37.5	83.6
		BPL not benefited	27.3	64.3
		APL	10.0	11.4
	Control	BPL not benefited	33.3	80.8
		APL	7.7	33.3
Tonk	Project	BPL Benefited	34.4	93.0
		BPL not benefited	53.3	73.9
		APL	14.0	28.6
	Control	BPL not benefited	79.3	92.2
		APL	12.0	56.0

Table A15: Investigator's assessment of livelihood change in last two years (per cent households)

District			Declined	Remained same	Improved
Baran	Project	BPL Benefited	5	19	76
		BPL not benefited	8	28	64
		APL	6	17	77
	Control	BPL not benefited	50	17	33
		APL	59		41
Churu	Project	BPL Benefited	5		95
		BPL not benefited			100
		APL	10	10	80
	Control	BPL not benefited	12	75	14
		APL	21	29	50
Dausa	Project	BPL Benefited	2	8	90
		BPL not benefited	8	23	69
		APL	19	9	72
	Control	BPL not benefited	33	35	33
		APL	32	18	50
Dholpur	Project	BPL Benefited	25	25	49
		BPL not benefited	35	30	35
		APL	31	30	39
	Control	BPL not benefited	31	31	39
		APL	14	21	64
Jhalawar	Project	BPL Benefited	11	21	68
		BPL not benefited	36	21	43
		APL	12	29	59
	Control	BPL not benefited	19	31	50
		APL	14	21	64
Rajasamand	Project	BPL Benefited	33	18	49
		BPL not benefited	21	36	43
		APL	9	41	50
	Control	BPL not benefited	17	15	67
		APL	14	25	61
Tonk	Project	BPL Benefited	14	16	70
		BPL not benefited	35	30	35
		APL	14	33	53
	Control	BPL not benefited	23	31	46
		APL	18	43	39