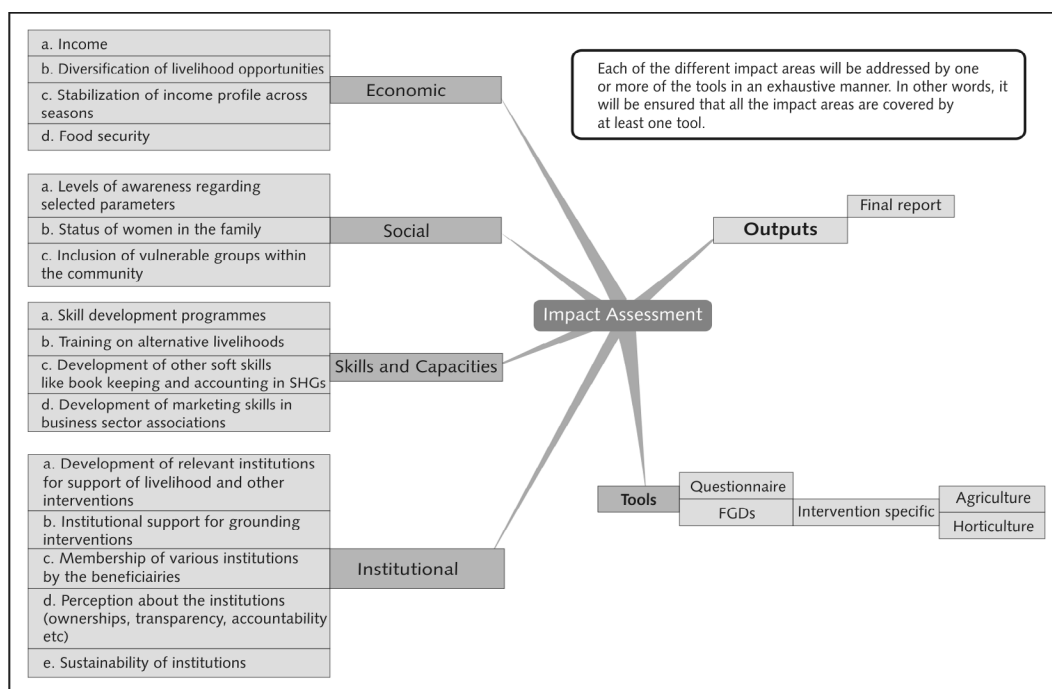


# Livelihoods of Tribals in Jharkhand under the Central India Initiative: Impact Assessment Study

The study administered a questionnaire to three groups.

1. The first group comprised households that were direct beneficiaries of the interventions initiated by PRADAN (members of an SHG).
2. The second group comprised households in villages that were the part of the activities of PRADAN but were not benefited directly by its interventions (not members of an SHG).
3. The third group comprised households that were selected from non-beneficiary villages.

**Fig. 1: Scope of the Study**



The rationale behind collecting data from these distinct groups was the following. To assess the impact of the interventions of PRADAN, it would be necessary to assess:

- a) The impact on direct beneficiaries.
- b) The overall effect of the interventions of PRADAN on the village.

c) How this compares with the similar households in non-beneficiary villages.

Everything else remaining the same, the hypothesis is that direct beneficiaries will have better outcomes as compared to the other two groups. However, this will be impossible to control because of factors attributed to the

way the project is designed. For instance, the average outcome of the project beneficiaries may be much worse compared to those of the non-beneficiaries in the village because the poorest may be the target group of the interventions and the comparatively better off may not have been targeted in the project. The analysis of the responses from the questionnaire will provide us with quantitative information on the characteristics of beneficiaries as compared to the other two groups, to get an indicative impact of the project.

In order to confirm these indicative responses, the other part of the Impact Assessment Study involved qualitative surveys through focussed group discussions (FGDs). These FGDs were conducted with the beneficiaries at the intervention level only. The largest group of beneficiaries was focused on agriculture; therefore, the number of agriculture FGDs conducted were four, whereas for the rest of the interventions, one FGD was conducted.

The FGDs were based on a structured format. The issues covered under the qualitative assessment provided further details about the processes and practices introduced by the project. This information has further enhanced the understanding of some of the results obtained under the quantitative assessment. Hence, the Impact Assessment Study needs to be considered in totality and not as the sum of parts of the two exercises conducted separately.

## QUALITATIVE RESEARCH FINDINGS

The results of the agriculture FGDs have been combined to represent discussions held across the beneficiary communities in order to get a representative view of the activities in this intervention. The respondents uniformly suggested that PRADAN has contributed to

the shift from traditional means of cultivation to the technologically advanced means of cultivation. Almost all the respondents showed an awareness of the 'SRI *vidhi*'. The farmers also opined that the return on investment has increased compared to when the earlier methods were adopted and the cropping intensity has gone up, which has meant that they can now cultivate crops in more than one season. The interventions by PRADAN have resulted in almost all households of the village continuing with agriculture; this has reduced the migration of youths to different cities and nearby towns during the *rabi* season. The discussions revealed that the following changes have taken place due to the intervention in this area.

Ninety per cent of the farmers of the area have begun using better certified High Yield Variety (HYV) seeds instead of traditional seeds. The income of beneficiaries has increased with the capacity building and training programmes conducted by PRADAN for the farmers.

Similar results have shown up in the quantitative analysis. (The average annual family income of beneficiary families is reported to be 50 per cent more than the beneficiary non-SHG respondents and 35 per cent more than the non-beneficiary respondents.)

The cropping pattern has changed and more cultivable areas are being covered in both the *kharif* and the *rabi* seasons in a year. More farmers have started vegetable cultivation thereby increasing income from agriculture. The cultivation of oil seeds has also increased. Food security, which the respondents defined as two full meals in the day, has increased from 30 per cent to 90 per cent of the households involved in agriculture. The use of inputs like such as fertilizers, pesticides, green manure and vermi-compost have enriched agricultural lands. The dependence on and exploitation by

local moneylenders have been reduced to 5–7 per cent from 70–80 per cent. The intervention has also led to the formation of a cooperative society by the farmers, to provide support in the supply of inputs and the marketing of produce at competitive prices.

#### a. Economic

Almost all the participants across the groups said that their income increased by an average of 60 per cent as compared to their income before the interventions of PRADAN. By following modern methods of cultivation, the return on investment has increased by almost 55 per cent and so has the cropping intensity. They said that have also started crop rotation in both *rabi* and *kharif* seasons, with vegetable cultivation providing supplementary income. More than 15 per cent of the farmers are cultivating more of their own cultivatable lands and more than 50 per cent of the members have started cultivating more cultivable lands by taking the land on mortgage, leasing it or taking land on a share-cropping contract basis, which is enhancing their income from agriculture. This increase in income has helped the households to engage in agricultural activity during the *rabi* season instead of migrating from the village in search of work. As a result, migration has reduced in the intervention areas.

Diversification of livelihood activities has led to vegetable cultivation, fruit tree planting as well as the introduction of dairy animals. The planting of fruit trees has not led to any increase in income yet because there is a gestation period. PRADAN has arranged for training programmes, regarding the maintenance of these fruit trees and drip irrigation facilities in some areas. The work with dairy animals has been successful and has led to enhanced income for the participants.

Before the intervention, the beneficiaries opined that they did not have sufficient food round the year. They had to supplement their incomes through daily labour for a minimum of 2 to 3 months. Some of them also had to migrate to other states or nearby towns with their families during these months. However, with the interventions by PRADAN, migration has reduced and the availability of food round the year has improved. In some communities, the benefits have been remarkable, with almost 90 per cent of the population having year-round food security whereas, in others, the gains have been moderate. In certain communities, milk and milk products have also entered the food basket of the beneficiaries.

#### b. Skills and Capacities

Various skill development programmes have been introduced as part of the interventions, to enhance the delivery of services under the project. Some of these, which the villagers mentioned, include:

For paddy cultivation, the beneficiaries have been trained on the entire cycle of *kharif* paddy stabilization and 'SRI *vidhi*', starting from field preparation stage to the harvesting of paddy. Issues related to the selection of seeds such as the HYV, and hybrids such as 'Lalat' and 'Masoori', medication of seeds with salt water solution and Bavistin, preparation of the nursery bed as per the quantity of seeds, steps in the germination of seeds, monitoring of the water level in the nursery bed, preparation of the main field for transplantation, steps in the transplantation of seedlings, monitoring of the water level in the main field, quantity of fertilizers to be applied in the field, the precautions to be taken at each stage of the plant cycle, and weeding with the weeders supplied were covered in the training programmes for the beneficiaries.

The interventions of PRADAN in the area of agriculture were also accompanied by training provided for enhancing soil nutrients through biological and chemical fertilizers as well as better crop management through enhanced knowledge about pesticides. Further, the farmers have also been trained about irrigation methods and the usage of modern irrigation implements. These training programmes have been conducted in classroom settings in the PRADAN office in Ghaghara. Besides, experts from PRADAN also visit the fields of the beneficiaries, give them advice and demonstrate the techniques to be followed.

The responses of various groups on alternative livelihoods training were mixed. Some of them opined that there was not much emphasis on the development of alternative livelihoods. Some groups mentioned the work on dairy animals as well as sericulture introduced in their communities. However, they were not able to provide many details. PRADAN, though, has reported that training has been provided to the beneficiaries on poultry, lac, tasar rearing and reeling, and other livelihood activities.

During the discussions, it was reported that none of the SHG members in any of the communities were trained about maintenance of book of accounts and records of their SHG. However, they are aware that books of accounts and records are maintained in the SHG, for which PRADAN has trained resources. In each SHG, a literate boy of concerned village has been appointed as the Munshi and is paid Rs 10 per meeting for his services. These boys have been trained by PRADAN and are carrying out all these activities at the SHGs and the banks. PRADAN has also reported that SHG members are trained on understanding the books and the records.

### c. Social

The general level of awareness, in terms of the current minimum wage rate, among all the participants was low and they are incapable of signing their names. Similarly, their knowledge of health is poor. The participants had little knowledge of the steps to be taken immediately at the onset of diarrhoea (oral rehydration therapy, etc.). The use of herbs to cure malaria is still prevalent, and the participants are not able to discriminate quacks from pharmacists and doctors. Only in the case of acute illness do they visit the nearest large town. Men are perceived as superior in the community and the conditions in which a girl child is brought up are inferior to that of a male child. However, because of their newfound economic freedom, women have been able to go to the nearby cities on their own. Some of the participants pointed out that all the families are male-dominated and the decision-making powers for women are restricted. It has to be understood that the gender problems are deep-rooted and, thus, will require concerted efforts for a sustained period of time before results are widely seen. The attaining of economic freedom by women will certainly work as a catalyst to unshackle their gender-related roles and PRADANs work is reportedly helping women participate increasingly in economic activities. During discussions, the participants said that SHGs give priority to women-headed families and families with physically challenged persons during the selection of beneficiaries for certain loans. Also, these members have the same rights as the others, as far as all other issues are concerned.

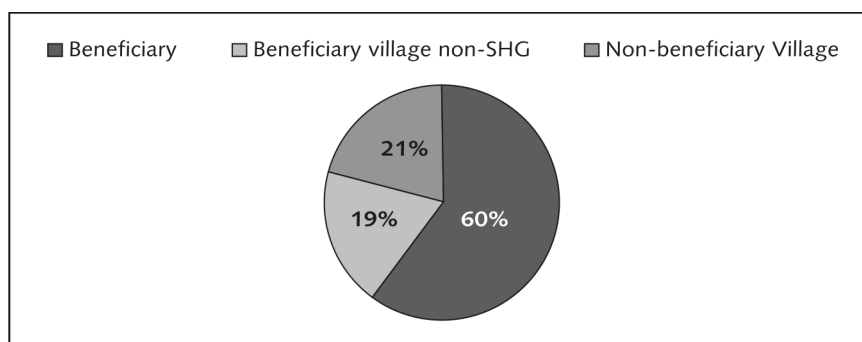
#### d. Institutional

The understanding of institutional support was low among some participants. Some groups opined that no supporting institutions have been created. In some groups, institutional support was interpreted as the cooperatives that facilitated some transactions and were able to realize the economies of scale. For instance, the participants mentioned Mahila Dugdha Utpadika Samiti, in which all dairy

beneficiaries are members and which has been registered under the Societies Registration Act of the Government of India. The Samiti currently collects milk from farmers and sells the milk to hotels and restaurants in Godda twice in a day. From the sales of the milk, Rs 3,000 is paid to the accountant and Rs 1,500 to the person, who usually collects and sells the milk every month. Both are appointed by the Samiti.

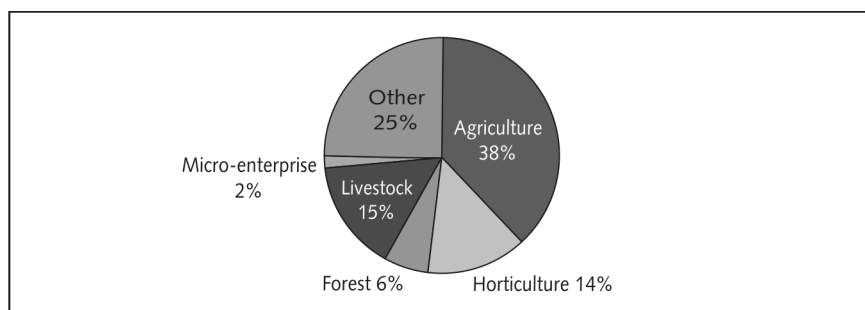
### QUANTITATIVE RESEARCH FINDINGS

Fig. 2: Respondent type



#### A. Occupational Diversification

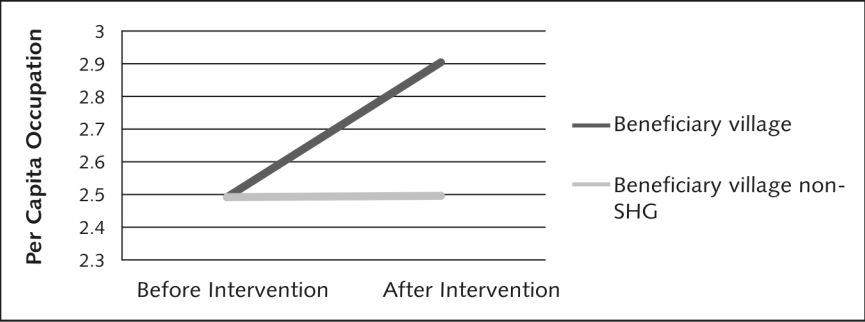
Fig. 3: Occupation before Intervention of all Respondents



One of the most important paths to income stabilization is to enhance the diversification of income-generating opportunities of the target groups. The various interventions of PRADAN aim at diversifying livelihood-generating opportunities through skill development programmes. Respondents were

asked about the various types of occupation they were involved in before the interventions of PRADAN. The research reflects the responses, including the multiple responses from individuals. For instance, a person could have responded that they were involved in agriculture and micro-enterprise.

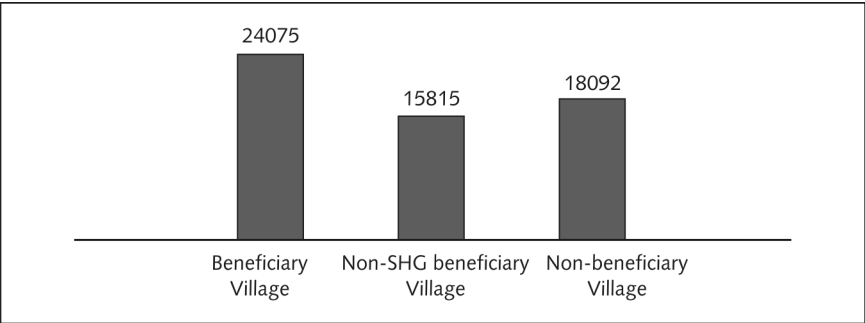
Fig. 4: Effects of Intervention on Occupational Diversification



It is found the target communities were involved in different occupations before the interventions made by PRADAN.

b. Income, Seasonal Variation and Food Security

Fig. 5: Average Annual Household Income



The main purpose of the interventions under the project is to enhance the income of the participating households. As a result, the role of an SHG as a vehicle for enhancing income has been emphasized under all the interventions of PRADAN. The variations in income may be due to the participation of individuals in interventions initiated by PRADAN. The hypothesis here would be that the beneficiaries of these interventions would have a higher income as compared to the others. Direct beneficiaries of the interventions earn 50 per cent more than the non-SHG members from beneficiary villages. The direct beneficiaries also earn 35 per cent more than the respondents from non-beneficiary villages.

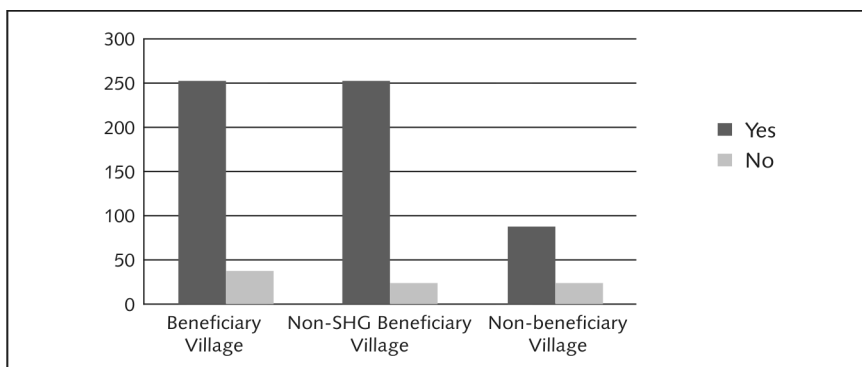
However, it must be kept in mind that there could be various other determinants of the difference in incomes across these different categories and, as a result, this variation should be interpreted with caution. For instance, it may be a case that some SHG members have certain innate characteristics that enable them to earn higher incomes. PRADAN has been working with the poorest members in the village, whose incomes have been comparatively less than others. The increase in the annual income of these villagers can hence be directly attributed to the different livelihood initiatives that they have taken with the help of PRADAN.

As pointed out earlier, the differences in income could also be because of certain other factors that might not have any correlation with the activities of the project. The size of landholding across the respondent categories shows that the beneficiary group has the largest average landholding as compared to the other two classes. Therefore, the higher

income is strongly correlated to the higher landholdings of this particular group. When we compare this scenario with the pre-intervention phase, it comes to light that many beneficiaries have been able to get their mortgaged land released; this has also led to an increase in the size of the landholding.

### c. Variations in income

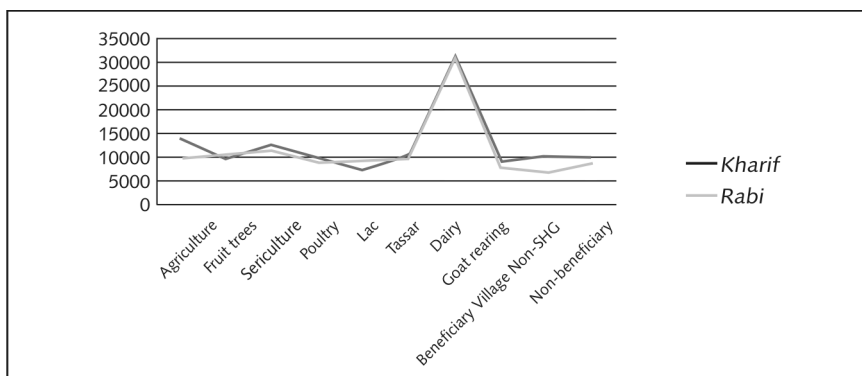
**Fig. 6: Seasonal Variation in Income**



One of the biggest challenges of the interventions among the target communities that are engaged in seasonal occupations is the variation in income across different seasons. This variation can have, among others, large impact on food security across seasons. Between 80 and 90 per cent of the respondents faced seasonal variations in income. Although there have been large efforts by PRADAN

to stabilize income from agriculture across seasons, the income from agriculture in the *kharif* season is approximately 40 per cent higher than the income from agriculture in the *rabi* season. Further, the non-SHG members from beneficiary villages are doing much worse when compared to other groups, with a variation of 30 per cent between their income from the *kharif* and *rabi* seasons.

**Fig. 7: Family Income Variation during *Kharif* and *Rabi* Season**





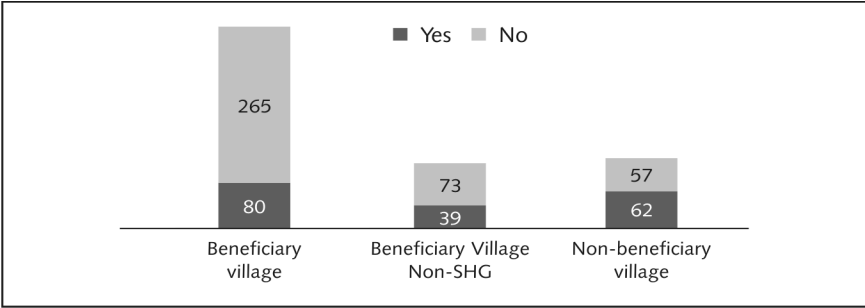
This stability amongst SHG members can be attributed to PRADAN because the diversification of livelihoods has led to this impact.

d. Food Security

The variations in income across the seasons has had an impact on the food intake across the seasons as well. Almost 25 per cent of the respondents think that there is a seasonal variation in their food intake as far as the beneficiary villages are concerned (inclusive of non-SHG members). However, for the non-beneficiary villages, the number of households

who face seasonal variation in food intake is 50 per cent. The beneficial impact of the work on livelihoods also has an impact on the non-beneficiaries, whereas the ratio in the case of beneficiaries is close to 20 per cent, the same in the case of non-beneficiaries is more than 50 per cent. The beneficiary village non-SHG members are better off with their ratio close to 30 per cent. In economic terms, it could be attributed to the increase in demand that has occurred due to increase in income of the SHG members in the beneficiary village. A trickledown effect is becoming visible in the non-SHG members of the beneficiary village as well.

Fig. 8: Seasonal Variation in Food Intake



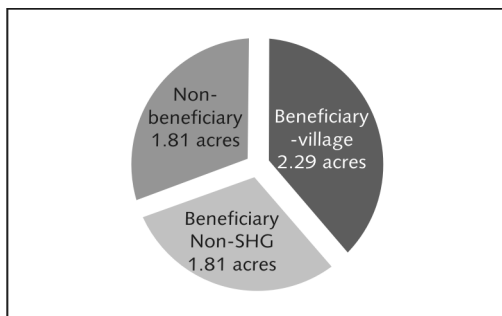
In order to get quantitative responses, we asked the respondents how many meals they have had in the last week. Almost 90 per cent of the beneficiaries responded that they have had three meals per day in the preceding week whereas the number for the non-beneficiaries was approximately 75 per cent. The stark difference in the beneficiary and non-beneficiary villages suggests the impact of diversification of livelihoods undertaken by PRADAN.

The food security aspect was further explored by asking respondents about the sufficiency of food around the year. In order to check for the consumption basket of beneficiaries, we asked them whether their consumption patterns

had changed due to their participation in the project. Almost 98 per cent of the beneficiaries responded in the affirmative. We further analyzed the consumption expenditure of different respondent classes on select product classes and compared the mean expenditure on these products. The comparison shows some interesting results. The expenditure on grains and cereals are approximately the same across the respondent classes, emphasizing that the non-beneficiaries, who have a lower income, spend a substantially higher proportion of their income on these products. The other observation is that a higher income is correlated with higher expenditure on certain items such as pulses, eggs, fish, meat and spices.



**Fig. 9: Average size of Land-holding**



#### e. Asset Ownership

We will now examine the relationship between asset ownership, especially land ownership, and how that has changed with the participation in the project. The beneficiaries own more land as compared to the non-beneficiaries of the project within the beneficiary villages as well as the non-beneficiaries from non-beneficiary villages. The primary reason for this can be attributed to the diversification in livelihoods that has led to the increased income of beneficiaries. They have been able to release mortgaged land as well as buy land in these areas.

The next step is to identify the change in the ownership of land over a period of time as well as across the respondent class. The first indicator we use is the land mortgaged in the last three years. The beneficiary group had almost 12 per cent of respondents, who mortgaged their land in the last three years, which is much higher as compared to the non-beneficiaries in the beneficiary villages (6 per cent).

The impact of the interventions introduced by PRADAN can also be measured by the impact on the redemption of mortgage after the intervention was introduced. The pie chart here shows that almost 9 per cent of the beneficiaries were able to redeem their mortgages after the interventions were

introduced. The percentages for the redemption of non-SHG members of the beneficiary villages are substantively lower at 4 per cent. However, the respective percentages for the non-beneficiary villages are comparable to the direct beneficiaries of the interventions of PRADAN. Another indicator for the enhanced income among beneficiaries as compared to the non-beneficiaries is the land taken up for share-cropping purposes. The findings clearly show that the beneficiaries were most entrepreneurial and least resource-constrained to take up land for share-cropping. Almost 40 per cent of the beneficiaries have taken up additional land for share cropping whereas the corresponding figures for non-beneficiaries are 26 per cent. The introduction and success of the package of practices (PoP) under agriculture intervention can be directly attributed to this. Institutional help also accounts for increasing entrepreneurial spirit among the beneficiaries, as is evident from these developments.

One of the most important assets in the target villages is their own house. Most of the households within the target communities own their houses. The pie chart below presents responses from the beneficiaries regarding the condition of their houses. More than 50 per cent of the respondents from the beneficiary category rate their own house as 'excellent' or 'good'. The corresponding percentage for the non-SHG members in the beneficiary village are close to 40 per cent and, for the respondents from the non-beneficiary villages, it is close to 30 per cent. Findings also shows that only 10 per cent of the beneficiaries rate their own houses as 'poor' whereas the corresponding percentages for non-SHG members are more than 20 per cent, and it is close to 30 per cent for the respondents from the non-beneficiary villages.

Most houses in rural communities still do not have toilets in their houses, which leads to

problems resulting from open defecation and associated diseases. The findings shows that only 6 per cent of all the respondents have a toilet. The beneficiary group is better off as compared to the other two categories in this aspect with 8 per cent of the beneficiaries having separate toilets. The corresponding percentage for the non-SHG members is 4 per cent and it is close to 3 per cent for the respondents from the non-beneficiary villages.

A majority of the houses own animals in this region; therefore, a separate shed for animals also signifies that a household can earmark certain resources for the upkeep of animals. The study also compares the respondent classes with regard to the ownership and maintenance of a separate animal shed. More than 65 per cent of the beneficiaries have a separate shed for animals. The corresponding percentage for the non-SHG members is 45 per cent and it is close to 55 per cent for the respondents from the non-beneficiary villages.

#### **f. Expenditure in selected categories**

Two of the most important indicators of improved economic well-being are the expenditure incurred by households on education and health. The spending on these two heads indicates the relative importance of education and health to the households. The findings present the expenditure on two heads across the respondent classes. In absolute terms, the beneficiaries spend the most on both the heads. In relative terms, as a percentage of the total income, the direct beneficiaries and the non-SHG members of the beneficiary villages spend nearly 40 per cent on these two heads whereas the non-beneficiaries spend approximately 33 per cent of their income. The figures suggest that the relative importance of these two is quite high in the entire sample. However, the figures also suggest that even though the non-SHG

members do not have the same levels of income as compared to the SHG members, they still spend the same fraction of their income on health and education. This could be considered a measure of the 'learning effect' from SHG members. The non-SHG members, owing to their proximity to the SHG members, would have seen the benefits of education and health expenditure whereas the same would not hold for the group of respondents from the non-beneficiary villages. In terms of health, a higher expenditure by SHG members can be attributed to the fact that awareness regarding diseases is high and they are willing to spend resources by visiting a doctor rather than a quack in the village.

#### **g. Credit**

Most of the beneficiaries in the rural communities are credit-constrained, which is one of the most important reasons for the lack of economic opportunities and social development. SHGs allow beneficiaries to pool in resources and access credit at a much lower rate as compared to the moneylenders, who not only charge extractive rates of interest but also exploit the poor and marginal loan seekers. The extractive rates of interest lead to high indebtedness among the marginal and credit-constrained rural households.

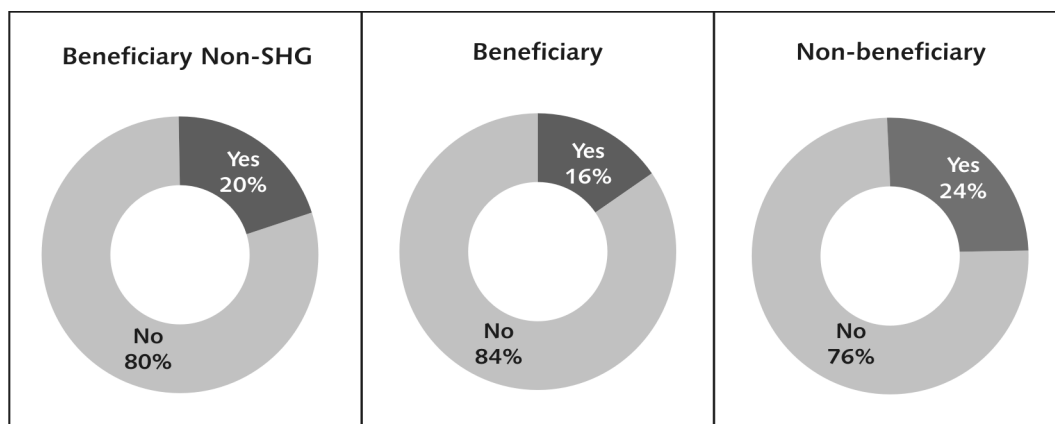
#### **h. Migration**

Due to the poor economic conditions in the villages, there has been considerable migration to urban areas. Any intervention that aims at enhancing access to better economic opportunities for the rural population must also address the challenges posed by the rural-urban migration. A key indicator of the success of the interventions introduced by PRADAN must, therefore, be the reduction in migration. During the assessment, we asked the respondents if someone had migrated from

their families in the last two years and for what reason. The unanimous reason for migration is economic and for better livelihood generating

opportunities. The extent of households that faced migration, across the respondent classes, is presented below.

**Fig. 10: Migration in last two years**



The findings suggest that the extent of migration among the beneficiary families was 16 per cent, which is the lowest as compared to the 24 per cent incidence of migration among respondents of non-beneficiary villages. Within the beneficiary villages, non-SHG members tend to migrate more as compared to SHG members. Further investigation has suggested that migration in the case of beneficiaries is short term in nature. Qualitative explorations have shown that higher incomes have led to a higher standard of living amongst beneficiaries.

We further explored the destination of the migrants. Nearly 30 per cent of the migration was to relatively far-off destinations such as Delhi, Punjab and Maharashtra. However, almost 50 per cent of the migration was to nearby states such as West Bengal and Bihar (included in others) and within Jharkhand. This observation, taken together with the observation that most migration is for economic reasons, suggests that migration is short-term and could be reversed with the continued interventions to strengthen livelihoods.

## Conclusion

The results of the Impact Assessment Study present a positive picture of the work that has been undertaken by PRADAN. The introduction of different interventions has led to increase in livelihood opportunities for the people in the tribal regions of Jharkhand. Seasonal variations in income and consumption have lessened, which has brought stability in the lives of beneficiaries. Entrepreneurship capabilities have been developed in beneficiaries and they have started moving towards self sustenance.

The results should also be read in a holistic way. Whereas we see that the expenditure on food is almost the same in all three categories, the beneficiaries have managed to spend on other areas affecting their development. Surplus from higher incomes have been spent on education of children, better health management and asset creation. Post intervention, assets of the beneficiaries have increased substantially, not only in terms of fixed assets like land but also movable assets like home accessories amongst others (motorcycles, farm equipment, etc).

Education of children among the beneficiaries is the highest as per the survey, with children being sent to complete higher education to the nearby district centres. Migration has gone down dramatically because the village has developed into a self-sustaining economy.

The effects though have not been limited to the beneficiaries alone. In a large number of cases, it has come to light that non-SHG members in the beneficiary village have also benefited from the work that has been carried out by PRADAN. Increased income has led to an increase in demand, which has led to further increase in income for the village as a whole. This is in stark contrast to the non-beneficiary villages. The increase in income has also helped in the upliftment of social indicators of the villages. Women are now more aware of their rights and are treated with equality. Formation of SHGs by PRADAN has helped develop a source of credit, which villagers can now fall back on to cater immediate needs. Credit is also managed responsibly, to meet investments requirements or acute social requirements such as marriages, etc.

The results from the quantitative and qualitative analyses show a promising picture overall. The results from the qualitative research show that there is substantive impact on income, food security and occupational diversification as well as on issues related to the strengthening of peoples institutions. The quantitative study further confirms most of these findings and provides the actual measure of achievement of the project, in terms of the attributes identified in the qualitative assessment. We outline some broad recommendations for the areas, which, in our assessment, would require further focused engagement.

In most people's institutions, the transition from PRADAN professionals guiding the day-to-day working of the institution to the beneficiaries

themselves taking over the activities is still not complete. It is recommended that, to ensure the sustainability of these institutions, a handing over and exit strategy is clearly formulated so that there is enough time for hand-holding the institution when the leadership has changed hands.

The main interventions by PRADAN are towards creating solutions for diversifying livelihood opportunities, mobilizing financial resources for income enhancement and creating institutional supports for beneficiaries. Whereas awareness generation is a by-product of these activities, it is not the direct focus of the activities of PRADAN. As a result, it was not surprising that throughout the intervention type, awareness levels among participants on selected parameters such as minimum wages, signatures, currency, health and hygiene were not satisfactory. However, for sustainability of the interventions introduced by PRADAN as well as enhanced capacities within the communities on social issues, it is critical for the tribal community members to have certain minimum levels of social awareness on issues mentioned earlier. We recommend the inclusion of a short-term awareness programme in the next phase. As a first step, a minimum critical awareness level can be defined jointly with the community, and with the help of community engagement tools, this information can be shared with people residing in programme areas. We believe that this would add on to the larger picture and increase the health and general well-being levels of people. We also recommend an impact assessment of this activity at the end of the project implementation.

The status of women in the study area was found to be comparatively better. Participation in economic activities has let the women folk enjoy a certain degree of freedom. However, it was also reported that the status of male child

is still dominant in the family compared to the female child. It was also found that decision-making powers of women were still restricted. We recommend use of social awareness methods such as plays, *nukkad-natak*, leaflets, pamphlets, movie shows, etc., to break the age-old established gender norms. These activities can be included in the programme because they are less resource consuming and can be dubbed as entertainment with a message. We understand that social constructs are not easily manipulated but require continuous and dedicated engagement. Therefore, it is critical to have a direct impact strategy, and indicators for measuring success on cross-cutting social issues such as gender and awareness, so that positive movement can be achieved in this direction.

Whereas the achievement in most livelihood interventions have been positive, lac cultivation has not been able to achieve the target. As explained by PRADAN, this is due

to an unexpected pestilence and PRADAN is working towards finding solutions to this crisis. It is recommended that, in the next phase of the programme, workable solutions are found to this problem and there is deeper engagement with the beneficiaries. The Indian Lac Research Institute should be asked to get further involved so that solutions to the problems faced by beneficiaries are resolved at the earliest and benefits from the PoP introduced are achieved.

Although the focus of the interventions from PRADAN is not on improved sanitation through toilets being built in homes, it is crucial that the enhanced income generated from the project activities are not spent on curing avoidable diseases. We recommend that awareness should be generated on this issue and the resources available from central and state schemes for sanitation services should be leveraged within the project for building and using toilets.