

INRM: Transforming the Lives and Livelihoods of the Rural Poor

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Undaunted by the challenges of poor irrigation, poor service delivery, low rate of literacy, poor health facilities, degraded land, under-developed agriculture, and lack of basic services in Godda, PRADAN's initiation of INRM, is slowly transforming the land, the women and the villages, bringing hope of economic self-sufficiency.

BACKGROUND

Godda is located in the north-eastern part of Jharkhand, and is an area that falls in the agro-climatic Zone VII. Two-thirds of the total geographical area of the district is cultivable. It is also fairly densely forested, covering about a tenth of the district (Source: DRDA, Godda), especially two of the tribal dominated blocks of Sundarpaharai and Boarjore. Although the district receives around 1,200 mm of precipitation, inadequate water harvesting mechanisms limit the scope of expansion of an agriculture-based economy in the area.

The district is low on most indices of development and has poor infrastructure—very little irrigated area (15.5 per cent of the cultivable land); poor service delivery; low rate of literacy (overall 57.68 per cent and female literacy 44.9 per cent); poor health facilities (institutional delivery is 22.63 per cent); degraded land; under-developed agriculture with low productivity per unit of area (909 kg of paddy per ha); and lack of basic services.

There is little understanding, among the local people, regarding these issues, which contributes to the sluggish development in the area. In spite of the best efforts of the government to ensure last mile delivery of its services, there has been a colossal gap in the implementation of welfare schemes. Low awareness in the community and lack of dedicated manpower to effectively implement and monitor the schemes within a stipulated time-frame lead to the slow development of the region.

Land-based, livelihoods-promotion activities faced major challenges because the area has low irrigation coverage (ranging from 4.6 per cent in Boarijore to 21.1 per cent of the cultivable land in Pathargama) and, therefore, rain-fed farming is the only choice for the predominantly rural populace. The rain in the region, however, is quite erratic. In 1996, the precipitation was 893 mm whereas, in 1999, it was 2,454 mm (www.jharkhand.gov.in). But even figures of high precipitation are, at times, illusory because even a good monsoon year may be marked by long, dry spells between two downpours. The long gaps between rains gravely affect plant flowering and fruiting, and eventually translate into substantially low yield of crop. Further, a significant high proportion of rainfall, estimated to be around 50 per cent, drains out to small tributaries, leading to poor in-situ conservation. This seriously compromises the carrying capacity of the land, for both the *kharif* and post *kharif* crops, thus further pushing farmers into the vicious cycle of poverty and perpetual indebtedness.

Despite having an average of one hectare of land-holding per family, the return from agriculture is abysmally low, mostly owing to poor agriculture management practices. The average productivity of common crops during the baseline assessment is depicted below:

Table 1: Average Productivity of Common Crops

No.	Crop	Productivity (Quintal/Acre)
1.	Paddy	11.3
2.	Maize	2.3
3.	Wheat	1.4
4.	Rapeseed	5.6

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People usually fear investing in alternative ventures such as horticulture and vegetable cultivation because of the lack of reliable irrigation facilities and because they lack awareness and confidence. Factors such as free grazing practices, poor storage and transportation facilities, the lack of exposure or linkages to

markets constrain the farmers from venturing into non-traditional and multi-cropping. Most of the cultivable land, therefore, has remained fallow for years.

Gradually, the farmers have become content with less risky crops such as paddy, maize and potato, and have inadvertently compromised on the nutritional security of the household, especially that of the women and the children. Field experience in Sundarpahari and the results of the analysis of the data collected show that around 50–55 per cent of the children are malnourished, with 23 per cent of them severely so whereas more than 75 per cent of the women are anaemic.

The lack of awareness about government programmes and procedures contributes to the low and impassive involvement of the community in owning, monitoring and implementing of these programmes. This has seriously jeopardized the effectiveness of state-sponsored programmes. Instances of poorly maintained and sub-optimally utilized community infrastructure are not an uncommon sight.

The only certainty in the above scenario has been the seasonal distress migration. The project's baseline sample survey conducted in Sunderpahari block revealed one or more members of a family migrating from the village in 62 per cent of the households. The lack of round-the-year reliable livelihood

avenues contributes to the high incidences of poverty and creates a flourishing ground for moneylenders who lend money at exorbitantly high rates of interest, sometimes as high as 120 per cent per annum. Due to indebtedness, people are often compelled to mortgage their productive land for a paltry amount. There are instances of farmers, who have mortgaged their land at the rate of Rs 350 for five years, to meet credit exigencies. A significant number of people migrate for a short term, to make around Rs 5,000. Data indicate that even a little augmentation in income would cover the gap and lead to a momentous reduction in migration.

The unrestrained run-off and erosion of the top soil year after year has led to the deterioration of the quality of the land. A major portion of the humus has got deposited in the lowlands, making it fertile whereas the uplands have gradually lost their productivity. The community is despondent, unaware of how to restore the wasted uplands. Even if there were the will for restoration, the lack of access to the required capital has hampered the translation of this desire into action.

The community is experienced in handling funds of a few thousands in their SHGs; however, helping the members to handle large amounts and teaching them account-keeping were the major challenges for the team.

INITIATION OF INRM

In order to bring considerable and enduring change in the lives of impoverished families, the PRADAN team decided to promote at least three different livelihood avenues for each beleaguered family. Taking the average landholding of a family as one hectare, an ambitious target was set of providing Rs 40,000 annually to them, to ensure round-

the-year food security, through optimum utilization of land and water resources.

The mammoth target called for building strong institutions and required systematic investment in building the capacities of people. There was also a need to demonstrate apt models of livelihood and create a support structure, both, at the community and at PRADAN's professional level. In order to ensure sustainability, the community was central to all programme interventions.

PRADAN initiated INRM, with support from the Special SGSY Project. The main focus of the programme was the large-scale capacity building of poor families, to facilitate the adoption of improved technologies and practices, to attain rapid growth in farm and farm-allied sectors, and to enable villagers to access mainstream markets for economic gain.

PRADAN had already promoted strong women's collectives through SHGs and the associative tiers, namely, Clusters and Federations. The concept of undertaking holistic, integrated and inclusive development gave rise to other institutions such as the *tola sabha* (hamlet-level association). Unlike SHGs and Clusters, where participation is restricted to women, the *tola sabhas* include both men and women. The new institution also gave the women the opportunity to participate in local matters and take the lead in the relatively macro-spheres such as land and water planning and development.

From its inception and gradual progression, the involvement of the *tola sabha* in the implementation of projects is as follows.

- ♦ **Village Selection:** Villages were primarily selected on two factors—the availability of functional SHGs in sizeable numbers

(around 40 members) per hamlet and a high incidence of poverty (70 per cent below the poverty lines, BPL, families)

- ♦ **Concept Seeding:** Before the inception of the project, all the *tola sabha* members participated in reflection and realization exercises about their current state of being. For smooth and transparent implementation of the project, two special committees were formed in each *tola sabha*. The Project Execution Committee (PEC) comprised seven women members from different SHGs, and an Advisory Committee of two or three selected male members for techno-managerial support. One accountant was also hosted by the community for book-keeping. All adult members (both male and female) were members of the *tola sabha* and acted as a watch group.
- ♦ **Pre-Planning Preparations:** Before formulating a detailed implementation plan (DIP), the members of the *tola sabha* were trained on the following participatory rural appraisal (PRA) tools.
 - **Wealth ranking** (socio-economic profiling of each family undertaken)
 - **Resource mapping** (all kinds of land, forest, water, habitation resources, etc. mapped on the revenue map)
 - **Land-use mapping** (pre-project use of every patch of land plotted) and
 - **Ownership mapping** (who's where, including the status on livelihood opportunities for the landless mapped)

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- ♦ **Planning Process:** During the finalization of the DIP and the budgeting, the following points were intensively deliberated upon by the community.

- Would the poorest sections of the community under the *tola sabha* benefit from the very first year?

- Would the implementation in the initial year generate some benefits to most of the beneficiaries?
- Which month would be appropriate for the execution/creation of the structures/assets?
- Would the water harvesting structure get priority over ground-water using structures?
- Which part of the plan would be converged with government schemes such as MGNREGA?

The entire process of this INRM-based Special Project, from initiation to implementation, led to the step-by-step empowerment of villagers, especially women, who were then able to manage large multi-dimensional projects. Concept seeding was conducted on issues of soil and water conservation techniques, for example, project elements included the 30 x 40 model (a method of in-situ soil and water conservation by dividing the un-bunded and un-terraced uplands that have 3–8 per cent slope into small plots of 30 ft along the slope by 40 ft across the slope) and the five per cent model (an in-situ rainwater harvesting method, suitable for medium up-lands. This is so designed that each plot has its own water body, the 5 per cent area of this plot would be sufficient to hold the rainwater, which otherwise would flow out of the plot as run-

off). Other elements that were considered were upland and lowland wells, lift irrigation, seepage tanks, vermi tanks, etc., as well as land treatment, horticulture and timber plantation, land husbandry, staggered trench with semialata plantation.

An understanding about the physical status of resources, their positioning and inter-relation was reached by focussing on groundwater recharge through various tools such as visual-based integrated learning system and the transact walk. An analysis of current trends on the use of every patch of land and the constraints identified were taken into account, to address the gap of the aspired state of inter-relation among resources as well as future utilization. The probable solutions to overcome these constraints were also framed. The *tola sabha* members were provided the techno-managerial training and exposure to INRM. The community made the layout and executed it under the technical guidance of a specialist from PRADAN. Consensus and clarity were arrived at about the division of roles, especially those to be played by various people, including who would monitor the project.

During the implementation of the INRM programme, the *tola sabha* reviewed the physical and the financial status in detail in their monthly meetings, and any deviation from the initial plan was thoroughly discussed. Appropriate modifications and alterations were made with the consent of the members of the PEC, the community and the *tola sabha*.

CHALLENGES

- 1) The community had a deep inclination for traditional water structures such as wells and large sized ponds and resisted other structures.

- 2) Convincing the community about creating water harvesting and ground water recharge mechanisms as a long-term strategy proved to be challenging. The demonstration held for a few farmers in the first year helped in overcoming the inhibition of other farmers.
- 3) The efforts to integrate fallow land through horticulture met with resistance from the community, mainly due to the social constraints such as grazing and theft of plants.
- 4) The people who were accustomed to the casual implementation of schemes such as MGNREGA were averse to the stringent quality norms of the project. However, the enforcement of quality and economic efficiency was non-negotiable and posed a major challenge in the beginning. Unskilled labourers, who earlier executed earth work with ease, without adhering to stringent quality norms, found a lot of difference in the expected work quality. This mismatch in work culture, led to a labour scarcity initially.
- 5) During the implementation, there were numerous instances when the perceptions of the people regarding the utility of the uplands or fallow lands underwent a paradigm shift when the apparently unproductive land yielded an abundant produce of vegetables such as tomato and chili within horticulture plots through inter-cropping. However, large-scale coverage and replication has still been difficult to achieve.

STIMULATING FACTORS

- 1) The rapport and trust developed between the PRADAN professionals and the community, gained mostly during previous programmes of the Ministry of

Rural Development helped mobilize the community.

- 2) The project also capitalized on the previous familiarization of the community with INRM in the district. Hence, a few farmers who had been earlier exposed to the concept, helped in influencing the community from the second year onwards.
- 3) The transparent system promoted for financial transactions at all levels kept all the stakeholders duly informed about each development.
- 4) As a result of the organizational training and the exposure programmes on similar INRM models in other PRADAN operational states, the Godda team already had a rudimentary knowledge of the nuances of the INRM programme. This gave a head start to the project.
- 5) The availability of good prototypes of the INRM work, across different states under PRADAN's operation, facilitated easy and effective vision building exercises of the community through exposure training programmes.
- 6) The significant focus on capacity building of the *tola sabha* members shifted the responsibility of programme execution from PRADAN and empowered the community.
- 7) The agility in the programme structure, for autonomous decisions of the *tola sabha* regarding time and labour management, further propelled the project.
- 8) The demonstration of success by the immediate beneficiaries, regarding the utilization of assets/resources created in the first year, helped in scaling up of interventions within the stipulated mandate.

KADAMPUR VILLAGE: A CHANGED PICTURE

PRADAN intervened in Kadampur village of Sunderpahari block in 2008 and promoted two SHGs (covering 27.65 per cent of the households) in one hamlet. Three more SHGs were promoted in other hamlets of the village. There are currently 59 households under five SHGs, which constitute about 57.5 per cent of the total households in the village.

'Kadampur Gram Vikash Samiti', the *tola sabha* of Kadampur, comprising 36 SHG members and their male counterparts, has executed work worth Rs 16 lakhs between 2012 and 2014. Around Rs 6.71 lakhs was invested in land and water conservation and tree-based activities; Rs 7.51 lakhs in creating a micro-irrigation system; and Rs 1.74 lakhs for agricultural development.

Most of the land water and agriculture work was undertaken in 2012–13 and 2013–14. The estimated change in productivity varies from 5 tonnes per ha to 6.5 tonnes per ha, over the baseline productivity of 4.5 tonnes per ha. Paddy, for instance, used to be highly vulnerable, both during the transplantation and during the flowering season. However, after the creation of assets, mainly of water-related infrastructure, productivity has increased by 1–2 tonnes per ha.

In addition to the 2 tonnes per ha average additional increment in production, which contributes an additional three months of food security for a family, the cash income per family from other cash crops such as vegetables in *kharif* and *rabi* has been around Rs 6,500 per family from six decimals of land. The creepers are the major vegetables cultivated by the farmers in this village. The range of income from five decimals is Rs 5,500 to 8,300. This earning from one season convinced many

families in the village to take up this crop. Hence, now 22 families are participating in this intensive agriculture in the village and other members are expected to follow in the coming season.

The change in perception of the farmers and the farm scenario is reflected in the following:

- 1) After the execution of INRM, the members of the *tola sabha* now have a better understanding of the innate potential of their natural resources, terrain pattern, inter-relationship between resources, water holding capacity of various patches of land, present use of resources as well as the future plan around the resources.
- 2) People have demonstrated their commitment to tapping the run-off. An average 80 decimals of land per family has been treated under the 5 per cent model, which is enough to generate seven months of food security per family, even during dry spells.
- 3) Almost half the families have benefitted from horticulture intervention done over 1.73 ha of land, with a potential to fetch Rs 7,000 per family from 2017 onwards.
- 4) Another 80 decimals of land per family has been brought under assured irrigation through the installation of a micro-irrigation system. This is enough to generate five months of food security along with a minimum Rs 10,000 of cash income per family.
- 5) Around 24 people have willingly participated in the organic method of agriculture. Around 17 vermi-tanks have been created, of which five belong to the families from the poorest strata, as identified through wealth ranking.
- 6) People have now begun to identify and articulate the social constraints that make them reluctant to transcend to optimum utilization of the created resources and have begun mass mobilization of people against the tradition of free-grazing.
- 7) Some marginal/landless families from the poorest section are still reluctant to synchronize with the new practices. The *tola sabha* is making concerted and sincere attempts to bring them into the mainstream by making special provisions for crop demonstration and training.