RESEARCH HIGHLIGHTS

2019-20

National Institute of Rural Development and Panchayati Raj
Ministry of Rural Development, Government of India
Rajendranagar, Hyderabad - 500 030,India

www.nirdpr.org.in

VISION

The vision of NIRDPR is to focus on the policies and programmes that benefit the rural poor, strive to energise the democratic decentralisation processes, improve the operation and efficiency of rural development personnel, promote transfer of technology through its social laboratories, technology park and create environmental awareness.

As a 'think-tank' for the Ministry of Rural Development, NIRDPR, while acting as a repository of knowledge on rural development, would assist the Ministry in policy formulation and choice of options in rural development to usher in the change.

MISSION

To examine and analyse the factors contributing to the improvement of economic and social well-being of people in rural areas on a sustainable basis with focus on the rural poor and the other disadvantaged groups through research, action research, consultancy and documentation efforts.

To facilitate the rural development efforts with particular emphasis and focus on the rural poor by improving the knowledge, skills and attitudes of rural development officials and non-officials by organising training, workshops and seminars.

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FOREWORD

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महानिदेशक

Dr. G. Narendra Kumar, IAS
Director General

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FOREWORD

The National Institute of Rural Development and Panchayati Raj takes up research studies across the country in order to achieve a set of objectives such as that of gaining first-hand insights about the requirements of rural population, process of rural transformation, implementation of flagship programmes of Government of India and assessing the impact of various schemes. These studies contribute significantly to knowledge creation and building up evidence on critical aspects pertaining to rural development, poverty alleviation, livelihood promotion, policy formulation, etc. The research findings provide a better understanding of the ground realities in rural areas and give a clear picture of the prevailing situation as well.

In order to facilitate wider dissemination of the findings of the studies, NIRDPR is bringing out the annual publication of Research Highlights. With immense pleasure, I am presenting the Research Highlights for the year 2019-2020. These studies are mainly related to irrigation management, MGNREGA, Land Distribution Programmes, Delivery of Public Services, PR Functionaries in India, Role of Service Sector, Manual Scavenging in India, Transforming India through Strengthening of PRIs, NRLM, Social audit, CSR Initiatives, Financial Inclusion Programmes, Swachh Bharat Mission, Watershed Management, Rural Infrastructure, Health & Sanitation etc. The findings of these studies will be useful for the policy makers, academicians and rural development functionaries to understand the ground realities.

Hyderabad
26th July, 2022

Dr. G. Narendra Kumar, IAS
Director General,
NIRDPR, Hyderabad.

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PARTICIPATORY IRRIGATION MANAGEMENT THROUGH WATER USER ASSOCIATIONS: AN ASSESSMENT OF SOME SELECTED IRRIGATED COMMAND AREAS (MAHARASHTRA, TAMIL NADU AND TELANGANA)

Dr. U. Hemantha Kumar
Dr. G.V.K. Lohidas
Dr. K. Prabhakar
Dr. Siddayya

Introduction

The study looked into either full or partial transfer of powers to the Water User Associations (WUAs). Further, it was analysed, based on available vast literature, whether full transfer of powers has taken place as far as irrigation management responsibilities are concerned (operation & maintenance, water distribution, fee collection, etc.) in some of the States. While only partial transfer has taken place in case of assessment, collection of fees and assured supply of water occurred in some other States. None of the States have concentrated to the catchment area protection and conserve water much. All these gaps have been thoroughly analysed in the study.

Objectives

- To assess the involvement of WUAs in delivery mechanism, financial self- sufficiency, repair, restoration and renovation of the system
- Identify the comprehensive assessment of the WUAs legislation, its feasibility and practicability in terms of execution, and
- Examine the policy environment facilitating the effective functioning of the institutional mechanism and their sustainability in the long-run

Methodology

- One major Irrigation Project Command Area (either in Canal or Tank irrigation system) in selected sample States
- Data was collected at WUA (Macro) and Household (Micro) levels
- At Macro level, 10 WUAs were covered in each sample State under Irrigation Project Command Area (20 per cent in head reach, 40 per cent in middle reach, 20 per cent in tails ends and 20 per cent in tank system within the command area)
- At Micro level, 150 HHs in each Irrigated Command area (50 Head reach; 50 Middle reach and 50 tail-ends include tank system through Random Sampling)

Study Area

The study has been carried out in three States, namely Maharashtra, Tamil Nadu and

Telangana by selecting one district in each State. Pune in Maharashtra, Tiruvannamalai in Tamil Nadu, and Medak in Telangana were chosen for the study.

Analytical Framework

- Whether full transfer of powers in terms of conservation, management, assessment, collection of fees and governance including distribution, sharing and regulation has taken place?
- How far the WUAs participate in conservation/protection measures, repairs, equity are implemented/being carried out/being maintained in command areas?
- How far WUAs are being developed to cope up with mechanisms –system management on technical and financial considerations?

Study Findings

- At macro level, the analysis was based on the information collected from 30 WUAs (10 sample WUAs were selected randomly from each State) across three sample States and selected irrigated command areas (distributed between canal and tank systems).
- In the case of WUAs, 66 per cent of the sample WUAs are located in the middle reaches followed by 18 per cent in the head reaches and 16 per cent in tail-ends. Whereas in the case of tank systems, 92 per cent of the sample WUAs pertain to irrigation tanks (Dusi –Mamandur Tank in Tamil Nadu).

Assessment at Macro (WUAs) Level

- Average area per WUA varies across systems and locations. The size of WUA affects the fund allocations, as the fund allocations are on per acre basis. While canal WUAs got allocated anywhere between Rs. 2,00,000 to Rs. 3,00,000 lakh per year, the WUAs got allocated between Rs. 50,000 and Rs. 70,000. On per acre basis tank, WUAs are getting more money when compared to canal WUAs due to the limited area under tank system. While tank WUAs got Rs. 200 per acre per year canal WUAs got about Rs. 100 per acre per year.
- Though tank WUAs received substantially higher allocations (2-4 times) when compared to canal WUAs, the amount is much lower than the requirement for tank restoration, i.e., between Rs. 3000 –Rs. 7000 per acre depending on the tank size without desilting.
- The low allocations are mainly due to the reason that funds are allocated for canal repairs rather than restoration of tanks. This approach suits well in the canal systems, as the main problem is canal maintenance. Whereas in the case of tank systems, the length of the distributor canals or feeder channels is not much.
- As per the guidelines, two general body meetings should be held in a year, i.e., one

before starting of the kharif season and another before starting of the rabi season, whereas the executive committee meets as and when necessary.

- In the last 10 years, field survey indicates that GB meetings were not held twice a year (except in Dusi-Mamandur tank in Tamil Nadu where regular GB meetings were held as per schedule), though more number of GB meetings were held in the head reaches. This could be due to lack of irrigation water in some of the systems during that particular point of time.
- The frequency of EC meetings was more in tail-end WUAs followed by head and middle WUAs. EC meetings are more frequent even in the case of tank WUAs.
- It is proposed in the Act that the responsibility of carrying out all these activities will be shifted to WUAs (EC) in a gradual manner. But it is observed that the only activity carried out predominantly by the WUA is conducting the meetings.
- In the absence of devolution of powers, there is no clarity even on the part of WUA presidents regarding the purpose and role of WUAs.
- Only 40 per cent of presidents are aware of the WUA's role in the canal systems while 59 per cent of them are informed of its role in the case of tank systems. Only 45 per cent of them are clear about the purpose of the WUAs in both the cases.
- Nevertheless, 90 per cent of the presidents in the case of canals and 70 per cent in the case of tanks endorse effectiveness of the WUAs (This is mainly attributed to the insufficiency of funds. Fund allocation to tanks is not according to their requirement).
- Devolution of powers to the WUAs is expected to improve the performance in 67 per cent of the canal WUAs. On the other hand, repairs to main system (tanks) would improve the performance in 60 per cent of tank WUAs.
- The relationships between the constitutional (Panchayati Raj) and parallel (WUA) institutions are cordial in more than 90 per cent of the cases. As far as the impact of WUAs is concerned, the results show a mixed picture.
- Hitherto studies observed that tail-end locations are getting sufficient water for the first time after introduction of WUAs; this is not coming out from the data at WUA level. The data on area under paddy (irrigated) and other irrigated crops shows a declining trend over the period in both canal and tank irrigation. This could be due to poor rainfall and water shortages/extreme drought situation in couple of occasions.
- Success of WUAs is linked with the funding; it is observed that little effort is being made to make them self-sufficient or financially independent. Women representation is very poor. Due to absence of devolution of powers, there is little awareness about the WUAs (among the Presidents and its members)
- User contribution has not really materialised, as the share of contribution is less than 10 per cent in all the cases (user contribution of 15 per cent is imbibed in the PIM Act). As a result, user involvement, stake and economic efficiency get least priority.

Household level Assessment

- Households were assessed in terms of stakeholder involvement, commitment, adoption of demographic process in the functioning of WUAs and devolution of powers to the WUAs, and also benefit-flows to the households due to the advent of WUAs. The sample was divided among head, middle and tail reaches of WUA in proportion to the actual number of households in respective location. Again, the sample was divided among marginal, small, medium and large size class farmers in proportion to their actual population.
- A limited number of farmers are involved in the pre-planning phase of the WUAs. The involvement of local community was much less in the middle and tail reaches of canal system and was almost zero in the case of tank system.
- Awareness regarding the WUAs is quite high among the communities. Greater awareness in the tank communities could be due to the smaller coverage, often pertaining to one village. The involvement of farmers in the programme is very poor.
- It is reported that farmers have elected the WUA members and the president in majority of the cases; voting was hardly conducted in the case of canal systems. Elections were unanimous in more than 80 per cent of the cases in canal systems while it is 50 per cent in the case of tank systems.
- Demographic process is measured in terms of conducting, attending meetings and decision-making process (collective/majority).
- While GB meeting was conducted only in the beginning of the WUA, on average, only one EC meeting was conducted in a year. The issues discussed mainly pertain to crop or system development.
- Democratic decision-making is more or less absent in the canal systems (either irrigation department or presidents of WUAs). Important issues like fund collection and allocations are hardly discussed. The opinion of the sample farmers was divided with respect to the functioning of WUA.
- In case of canal systems, middle and tail farmers are more satisfied than their counter parts in the head reaches. In comparison, tank WUAs seem to be faring better in satisfying their members. In the case of tanks, head and tail reach farmers are more satisfied than those in the middle reaches.
- Political interference appears to be the dominant reason for the member dissatisfaction, especially in the canal systems.
- There are disputes among WUA members of canal systems regarding works carried out and distribution of water. Greater number of disputes were reported in the middle reaches when compared to head and tail reaches.
- Lack of commitment and ownership also comes out clearly from the farmers' involvement in the maintenance of the systems. Farmers' involvement is limited to participation in elections, attending general body meetings and to some extent water distribution – important works like rehabilitation and resettlement and joint assessment

survey is found to be marginal. In case of canal systems, less than 20 per cent of the farmers contributed to the maintenance works, either in cash or kind. More farmers have contributed in the case of tanks.

Conclusion and Recommendations

The present study clearly brought out the lopsided approach of the reforms. The main lacunae in the reforms are at two levels.

a. Conceptual level

b. Execution level

a. At the Conceptual level

- Tank and Canal systems are treated as similar in fund allocations. There is no fund allocation for tank deepening and strengthening bunds. While the degenerated tanks needed more allocation for rehabilitation, the allocations under WUA were based on the command area. Unless water storage of the tanks is improved, there is no gain in improving the distribution systems.
- Ground Water Resources, the single largest sources of irrigation, are completely left out of the purview of the WUAs (Irrigations reforms are neither comprehensive nor followed an integrated water resource management approach). The interlinkages between tank and groundwater resources call for treating these two resources as complementary rather than substitutes.

b. At the Execution level

- Socially and politically advantaged people capture the WUAs. Since these parallel institutions are financially stronger than PRIs, equitable access to common pool resources is denied.
- Initiation of parallel institutions bypassing PRIs makes these institutions apolitical and focus on delivery.
- These institutions in their present form tend to dilute the social capital rather than strengthening it.
- The improved systems are expected to enhance the credibility of the department in providing assured water supplies, a precondition for increased water tariff.

◊ Though user contribution of 15 per cent is imbibed in the PIM Act there is very little contribution from farmers.

◊ Irrigation department is not willing to devolve powers as mentioned in the Act. All major activities are still carried out by Irrigation and Revenue departments, leaving only the responsibilities of water management to WUAs.

◊ Our study indicated that informal or socially embedded institutions are more effective than the formal WUAs. The reason being that informal institutions reflect commitment and cohesion, as it is evolved from within the system. It is flexible in adapting to the changing situations.

◊ In most of the WUAs, the presidents were nominated from a smaller village, which received irrigation from another channel. As a result, the president of WUAs was least interested in the distributary that served the other villages.

◊ Equity in water distribution is taken care of through rotational systems. Proper incentive structures are to be designed to support rule compliance. Self-sufficiency and resource strength is central to the sustainability of the institutions.

◊ Insignificant economic incentives – It appears that institutions would be effective if the economic gains are substantial. Reforms should initiate the process to convert all forms of water into an economic good through introduction of cost-based pricing as per volume and use. Efforts should be made to increase the awareness of the farmers about the benefits of WUA. Devolution of powers to the local level and making the WUA structure more flexible would go a long way in addressing the awareness problems. There is a need for exploring the possibility of integrating the PRIs into the reform process for sustaining the reforms in the long run.

PIM and Recent Trends

- Political dynamics in the sample States and postponement of WUA elections due to various reasons. Changes in terms of the president of WUAs.
- The new governments seem to be going against some of the initiatives of the earlier governments.
- One of the main demands of the WUA presidents was to revert to the election procedures of the original Act 1997 (Two-year period is too short and prefer direct elections to the WUAs, DCs, and PCs). Awareness about the WUAs.
- Devolution of powers to the WUA level in terms of assessment, defining the boundaries of the WUA and also demarcation of encroached common lands. The boundaries of the WUA should be on hydraulic basis, and not ayacut basis.
- Propose to enhance the financial viability of the WUAs through plantation and horticultural crops on common river beds, canal banks, etc. Further social forestry can be taken up on the encroached lands.

The federation of WUA presidents put forth two peculiar demands - i) delinking of WUAs from the village PRIs (canal regions of WUAs are often larger than the Village Panchayats, elite dominance in WUAs), and ii) representation of WUAs in the Legislative Council. (involvement of political parties)

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GENERATION OF SUSTAINABLE VILLAGE RESOURCE DEVELOPMENT PLAN USING PARTICIPATORY GIS APPROACH

Dr. N. S. R. Prasad
Dr. P. Raj Kumar
Shri D. S. R. Murthy
Dr. P. Kesava Rao

Introduction

Gram Swaraj (Village Self Government) is the concept by Gandhiji for total and integrated development of society, which would be possible only with decentralisation in all spheres of activities. The planning process has undergone a drastic change in recent years where decentralised participatory decision-making is resorted to ensure sustainability. However, for this participatory decision-making, accessibility to a comprehensive database which is easy to access and understand land records, topography, resources, settlement patterns and infrastructure new methodology and technology are needed. This is an area where spatial technologies play a key role in generating timely and reliable information for planning and decision-making.

Objectives

The specific objectives of the project are envisioned as follows:

a. To identify the present infrastructure and socio-economic conditions in the village and analyse the scenario.
b. To identify, analyse and prioritise the felt needs of village by social science research and through participatory GIS.
c. To generate action plans for improving the basic amenities and services, social, economic and environment, development.

Methodology:

Primary data collection was done using questionnaire, GPS and drone survey. Project field survey was the primary source of data collection. Census data, Mission Antyodaya data, SECC data, satellite data, data from departmental websites, cadastral map and topo sheet were the secondary sources. Data processing and analysis were done using GIS software. The information presentation is done by using maps and tables.

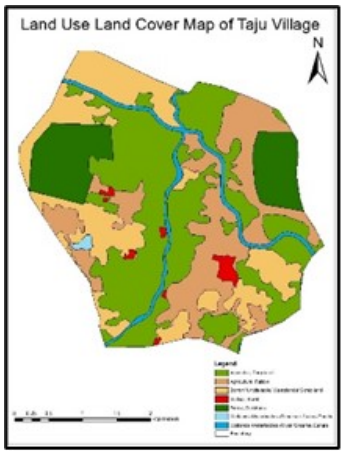
Study Area:

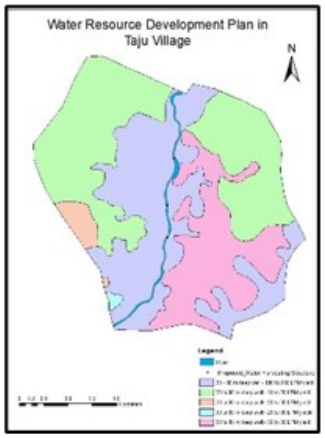
Taju village is located in Karjat Tehsil of Ahmadnagar district in Maharashtra, India.

Latitude and longitude of Taju are 18.498781 & 74.78637, respectively. It is situated 40 km away from sub-district headquarters Karjat and 115 km away from district headquarter Ahmadnagar. Talwadi Group is in the Gram Panchayat of Taju village. The total geographical area of village is 1278.62 hectares, 2.91 square kilometre (23 per cent) of the total village area is covered by forest. Taju has a total population of 1,531 people and about 290 houses.

Findings

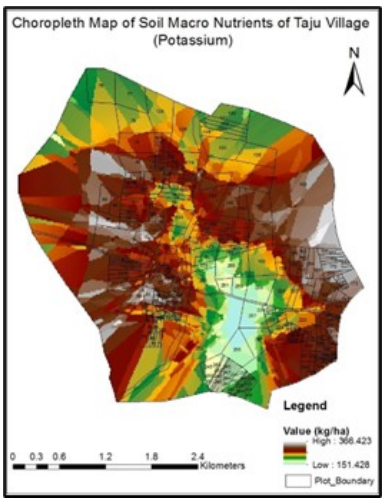
Agriculture is the main occupation of the Taju village and statistics show that around 90 per cent of the villagers are engaged in this vocation. Cultivation in Taju village involves hulaga, millet, sorghum in the kharif and rabi seasons. They use river, bore wells and wells for irrigation. Taju does not have any government seed centre or market. Only 10 per cent of the households are engaged exclusively in non-farm activities. Most of the crop lands are along the banks of the water bodies and they use bore wells and normal wells for irrigation on the other part of the village. The village has a lot of barren and fallow land. Neither warehouse for foodgrain storage is present within 10-km radius of the village nor primary processing facilities or access to custom hiring centre (agri-equipment) are available. Dug well is mainly used as primary irrigation facility. Bore wells and normal wells are also used for irrigation.

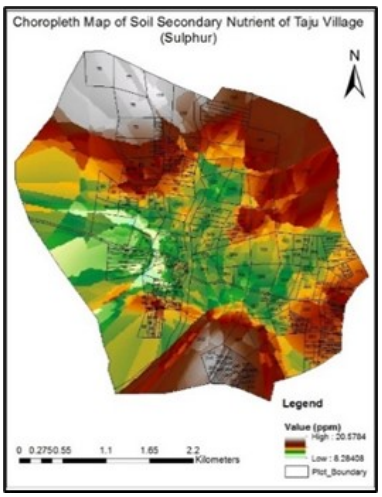


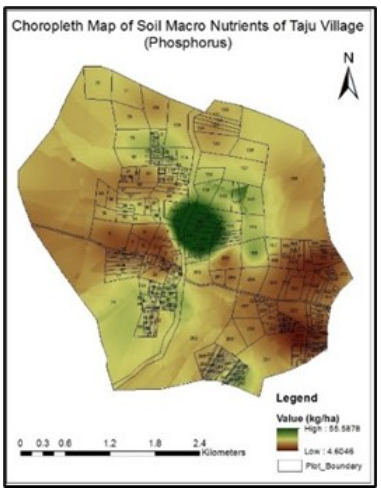


No soil testing centre and fertilizer shops are available within the 10-km radius. For soil information, the village depends on agriculture department through soil health cards. Soil health cards having the status of soil with respect to 12 parameters, namely N, P, K (Macro-

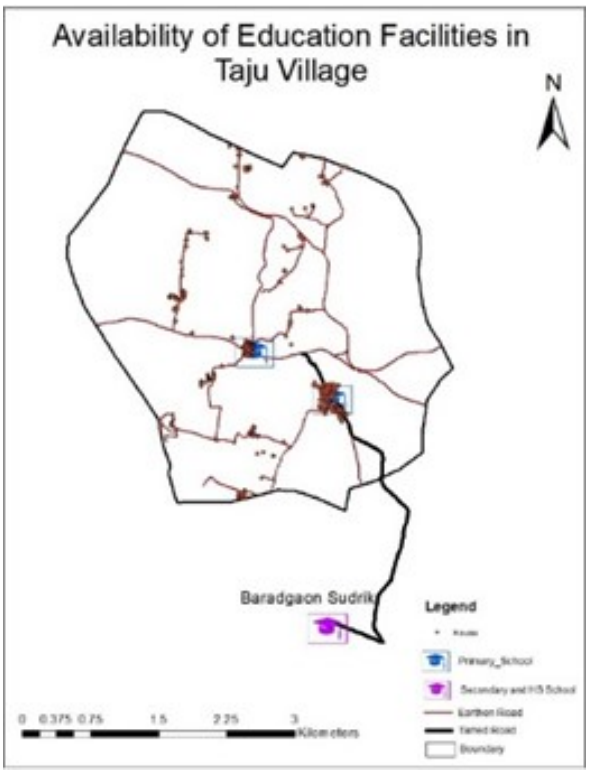
nutrients); S (Secondary- nutrient); Zn, Fe, Cu, Mn, Bo (Micro - nutrients); and pH, EC, OC (Physical parameters), are provided to all farmers. By using these cards, the soil parameters data has been collected and analysed. Further analysis has been done by Spatial Analyst Tools in the ArcMap, and Kriging, an interpolation method, was used for the mapping.

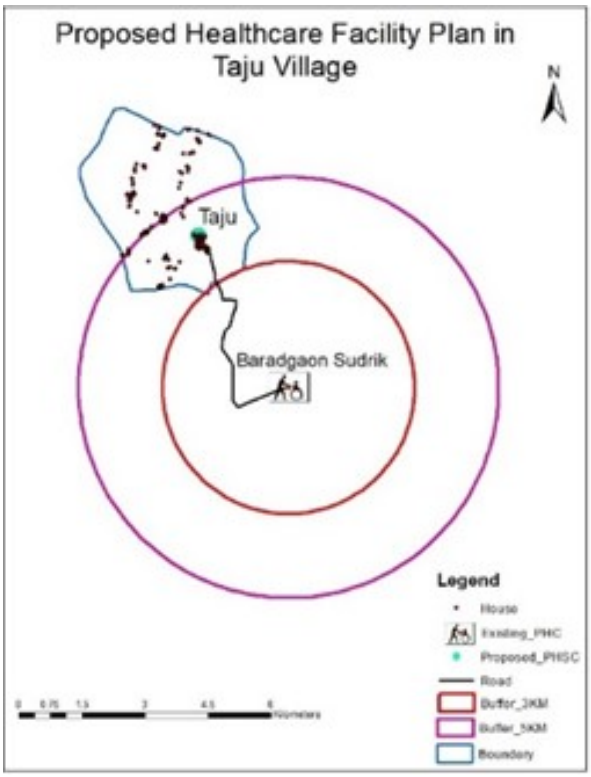




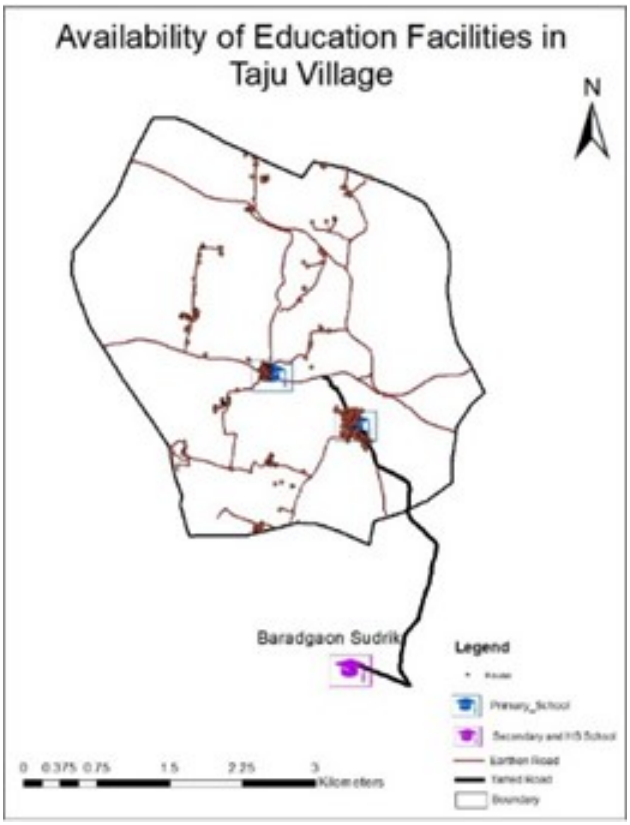


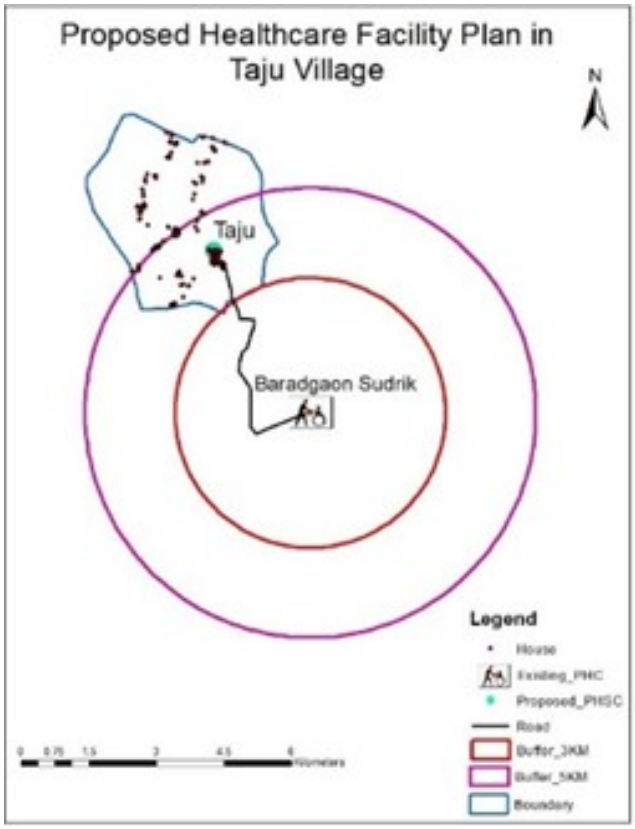
Field surveys shows lack of public transport facility in the village. Village roads are not connected to all other roads, which is a problem faced by the villagers and it comes under the critical gap. Except for one BT road, the remaining are earthen roads. The total length of the road is around 1 km. Due to lack of roads, transport facilities are also not available. The below figures show the existing and proposed road network in this village.





Taju has two primary schools for the children aged 0-5 years. During the study, the village had 177 children in this age group and 298 children in 6 to 15 years age group. There is no upper primary school and higher secondary school in Taju, and for higher studies, students have to go to the nearby high school in Baradgaon Sudrik.





As per the surveys, the village does not have waste disposal system, drainage facilities, PHC/CHC, sub-centre and veterinary hospital. People are following open defecation, and a critical gap exists in health and sanitation domains. Community biogas and waste recycling facility are not available here. While considering the transportation facility, population and the nearby villages, map pointing area is suitable for PHC.

Conclusion

It is important to bring more accountability and transparency to the process for preparing Village Development Plan, which can be achieved by linking it with the Geographic Information System (GIS). There is need to have objectivity in the planning process by acquiring relevant data and performing planning at GP level with the use of geographic data for sustainable development. It enables the user to take better decisions based on geographical data. With the aid of GIS and satellite imagery, a detailed visual record of the projects can be maintained, which can be accessed any time. Physical verification of the projects can be done by anybody, from anywhere and any time. GIS can increase legitimacy and acceptability of the PRIs among its stakeholders. This is especially useful in ensuring convergence of various activities and knowing all the works that are being taken up in a certain geographic area within the GP. Remote sensing and GIS have contributed to a large extent in analysing the required data for the analysis. Geo-analytic tools were used to get the results.

Drone mapping of village has given detailed information of crops, land use, dug wells and land parcels. Also, Gram Panchayat and community assets like village roads, ponds, canals, open spaces, school, anganwadi, health sub-centres, etc., are mapped. These maps are used to prepare better quality Gram Panchayat Development Plan. This would facilitate

monetisation of rural residential assets for credit and other financial services. Further, this would also pave the way for clear determination of property tax.

From the available resources, it can be concluded that the livelihoods of the people in the village can be improved by implementing the proposed road network, constructing PHC, etc. By improving the soil health factors, the crop production potential of farmlands can be enhanced. The construction of check dams can help restoration of groundwater and thereby address the drought sitiation.

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IMPACT OF MGNREGA ON DISTRESS MIGRATION IN THE VULNERABLE COMMUNITIES - A COHORT MID-TERM REPEATED MEASURES STUDY IN FOUR STATES

Dr. Pratyusna Patnaik

Introduction

The research focuses on distressed migrants, who migrate on conditions of distress, and whose working condition typically tend to be exploitative and hazardous at the place of destination, with limits on personal freedom, underpayment of wages, long working hours, debt bondage and unhygienic working environment. Despite such degrading conditions, migrants are often willing to engage in such works due to higher rate of wage at the destination and lack of employment opportunities in the source area.

There are sufficient reasons, for which migration of this sort is considered as 'negative' and 'un-sustainable' involving high social and environmental costs for both places of origin and destination. Such migration reinstates the need for better wage employment and rural infrastructure building programmes with an anti-poverty strategy at the source, which not only would provide employment opportunities during lean agricultural seasons, and at times of natural calamities but would also create rural infrastructure to support further economic activities in the rural areas.

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), which came into effect in February 2006 is one such programme, which intend to provide 100 days of guaranteed wage employment in a year to every rural household whose adult members volunteer to do unskilled manual work. It also aims to ensure social protection to the most vulnerable people in rural India, and ensure livelihood security through creation of durable assets, improved water security, soil conservation and enhanced productivity. It is in the above context the research aims to investigate the inter-linkage between MGNREGA and short-term labour migration arising, especially due to factors of distress.

Objectives

The broad objective of the study is to explore the inter-linkages between MGNREGA and short-term labour migration in conditions of distress. While doing so, the study has examined multiple coping strategies that rural households adapt to in conditions of distress, and to locate MGNREGA as one of the coping strategy and safety net among others available to these households.

Methodology

Given the specificities of the research, purposive sampling technique method was employed to choose the study sites (States as well as districts and Blocks). A combination of

interview method and focused group discussion was adopted to elicit relevant data from the field. Empirical data from sample households were gathered with the help of an interview schedule, which has been used as an efficient tool for collection of data from the field. Appropriate checklist was used to conduct the focused group discussions with key informants and local community leaders. Attempts were made to make the schedule a structured one with close ended questions for more scientific analysis.

Study Areas

Assam, Bihar, Madhya Pradesh, and Odisha

Findings

The impact of MGNREGA on migration in the study areas like Assam, Bihar, Odisha and Madhya Pradesh is average as nearly 43.9 per cent of the 1593 respondents in these States reported that they were benefited through the scheme. However, the intervention of MGNREGA has not reduced migration to a large extent. Only 12.8 per cent respondents agreed that migration has been reduced because of the intervention of MGNREGA. It was observed that in many regions, the average wage earned by a MGNREGA worker was lower than the market rate, while it was lower than the minimum wage in many others sectors. The respondents revealed that if MGNREGS work is strictly executed for period of 100 days or more than 100 days and the wages are directly transferred to the bank accounts of respective beneficiaries without any delay, it could help reduce distress migration. Further, it was observed that during the floods in Bihar and Assam, people were naturally forced to migrate as it was impossible to perform MGNREGA and other agricultural and non-agricultural works. Therefore, households were forced to migrate with their families to search other job opportunities, which in turn, has led to disruption of their children's education and access to family healthcare.

Conclusion

The study observed continuous transition between different types of migration for coping and survival and earning additional work/income. It takes place during environmental distress and is non-agricultural. People from Odisha migrated as unskilled labour with their family for a period of six months to nearer States to clear their debt. In the case of Assam, young people migrated to the northern and southern States as semi-skilled labourers before the floods. Further, it was found that able-bodied men from Madhya Pradesh migrated to the nearer States like Gujarat to earn income in non-agricultural season and drought. In Bihar, majority of the respondents have less agricultural land. They migrated to the nearest city in their State as a daily wage labourer. In Assam and Bihar, respondents used to commute to the nearest rural and urban areas to work almost every day. Therefore, we can say migration is happening continuously but the reasons and types of migration are differing from State to State.

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STATUS OF LAND ALLOTTED TO THE POOR UNDER DIFFERENT LAND DISTRIBUTION PROGRAMMES: AN EVALUATION IN SELECT STATES

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Introduction

Land is the primary source of sustainable livelihood. Ownership of land gives people social dignity, economic viability and a sense of security. It is a finite natural resource, which is unlikely to define limits to agricultural growth under the existing technology. This is especially true for south Asia in general, and India in particular, where much of the arable land has already been brought under cultivation, unlike the other developing countries in Sub-Saharan Africa and Latin America. National Centre for Advocacy Studies (2002) in the book 'Land for Life' confirms that it is an undeniable fact that the unequal distribution of land and natural resources are the key reasons for increasing poverty, economic stagnation, rural -urban migration and increase of violence. Hence, the utilisation of land plays a significant role in the development of a nation, especially for the rural community. On the other hand, landlessness erodes social status and makes people economically vulnerable and emotionally insecure.

India is one of the developing countries where land distribution programme was undertaken with a dual objectivity of efficient use of land and ensuring social justice. The distribution of land is a central question for the agricultural development and rural reconstruction since the inception of the economic planning in the country. According to the Second Five Year Plan Commission (1956-61), land reform was to create conditions for evolving as speedily as possible the agrarian economy with high levels of efficiency and productivity and to establish an egalitarian a society and eliminate social inequalities. It focused on '*socialist pattern of society'* and reduction of inequalities of income and growth through redistributing agricultural land in favour of less privileged class of society in rural areas. Further, it was believed that distribution of land to rural poor was to raise the standard of living as well as upliftment of economic condition of landless agricultural labourers, small and marginal farmers.

The Planning Commission of India has rightly observed that 'land reforms have been treated as an integral part of alleviating poverty, modernisation of agriculture and increasing the agricultural production programme.' The draft of Eleventh Five Year Plan reviewed the issue of land reform for agricultural equity and efficiency that would help in bettering the condition of rural poor. Agrarian societies of developing countries are marked by great inequalities of wealth, power and statue. In these societies, the most important material basis of inequality is the distribution of land. Land transfers by influencing ownership of land among the peasant households affect significantly their vertical mobility, the changing

position in the class structure and the rural inequalities in the distribution of land over time. The process of land transfers is influenced by a number of socio-economic, demographic and institutional forces.

Land has become an extremely scarce resource in India in the recent decades. Under rising population pressure, the land has been used extensively as well as intensively for food security and other uses. But in order to sustain productive capacity of land, it has to be used and managed properly through policy, institutional and technological instruments. The distribution of owned landholdings has become more egalitarian over the time, while the distribution of operational holdings has improved. Various studies revealed that somehow the incidence of landlessness has declined in recent years and this has happened across all social groups (SC, ST and others). Access of socially and economically deprived groups (SC, ST) to land has improved in all the States, but there is preponderance of tiny holdings. On this, a question was raised whether the socially deprived groups have really benefited from policy initiatives such as land redistribution. A cluster approach (in terms of concentration of their population) would be more revealing. In this context, it was suggested to provide some analysis of land ceiling and land redistribution. Incidence of tenancy has declined over the time and it has become less exploitative as the structure of land-lease market has been undergoing a change from share tenancy to fixed produce and fixed cash tenancy. Agricultural technology has been an important determinant of changing tenancy relationships. Consolidation of holdings has been undertaken in most of the States, but still a lot needs to be done.

Objectives

- To examine the status of the land allotted to the poor in terms of possession and productive use.
- To identify factors responsible for land alienation and non-possession of the land by the allottees.
- To assess the needs of allottees of land for making their asset productive and a sustainable source of income and employment.

Methodology

The present study is descriptive and analytical in nature for generating information about the status of land allotted to the poor under different land distribution programme in terms of possession and productive use.

Hypotheses

1. The land allotted is under the possession of the allottee
2. Productive utilisation of the land depends on the access to the inputs
3. The land allotted to the poor is not in a condition to cultivate.

Study Area:

The study was conducted in three States, namely Assam, Bihar and Uttar Pradesh. Two districts from each State, two blocks from each district and two villages or GPs in each block are drawn for the purpose of the study.

Findings:

The implementation of government land distribution programmes failed to receive desired objectives due to several problems. Firstly, in many cases State allotted the land to the rural poor but failed to provide them proper record of right. Secondly, majority of allotted land are remaining unused or unutilised due to the low quality of land. Thirdly, it was found the involvement of landlords as well as running legal cases in various levels of court between landlords and beneficiaries. From the study, it was found that only a few beneficiaries got benefited from the government allotted land.

- In Assam, land has been allotted to the poor in the rural areas under the various Act such as ceiling surplus and Minimum Needs Programme, etc. However, with the growth of population and the progress of land reclamation, the circumstances have changed from time to time and the policy regarding settlement had to be modified to suit the conditions prevailing at particular times. The land settlement policy in respect of agriculture lands in Assam had to be adopted according to the conditions prevailing from time to time. In due course of time, the land-use pattern has also changed. In this way, various land settlement policies have been taken up, conditioned by the changing circumstances.
- The families allotted land under various programmes are generally poor and major problem faced by them is finance for cultivation of land, purchase of inputs, development of land and purchase of agricultural assets. However, it is noticed that majority of the beneficiaries were not effective borrowers.
- The livelihood opportunity of the families in the study area was depending on cultivation cum agricultural labour. Some of the families are also depending wholly on daily wage earning even after allotment of land in their favour, because these households have neither physical possession on the land nor able to cultivate the land allotted to them owing to different reasons, especially in Bihar and Uttar Pradesh. However, employment opportunities for the beneficiaries outside the agriculture sector are very much limited in Sivasagar and Morigaon districts. The earning capacity of the families, who have been allotted land to a little extent, depends on the produce of small quantity of land allotted under the land distribution programme and mostly rests on daily wage earnings. The percentage of beneficiaries, whose families mostly depend on other non-farm activities, has increased during post land distribution period as compared to the period prior to land distribution. After the land allotment, the scope of taking up non-farm activities as income source has increased.

- Before the distribution of land, the major sources of income of beneficiaries were wage labour, especially in Bihar and Uttar Pradesh. Although land allotment has resulted in significant changes in the total income of beneficiaries, majority of the beneficiaries revealed that the unproductive agriculture land and the lack of scope for irrigation facilities were the major reasons for the dwindling income of the households.
- The landlessness has reduced to some extent due to implementation of various land distribution programmes, however, the landlessness at the State level is very high. There has not been any significant change in the poverty level among the beneficiaries; the socio-economic conditions still remain very pathetic. The land distributed to landless poor has been perceived by the few as of inferior quality and also not according to the size and needs of the family. In order to lift the poor allottees from the poor socio-economic conditions, the amount of land should be above the existing minimum level depending upon the productivity of land and availability of irrigation facilities.
- There is an increase in number of cases where landlords create legal hurdles for harassing the allottees to take ownership of the allotted land. Although beneficiaries reported that they were legal owners of the land allotted by the government, they are still unable to cultivate due to legal case running from last 10-15 years. In Bihar, 17 per cent of the people have 'parchas' but they did not have the physical possession of the land. Further, it was found that some of the land titles are held in the name of the eldest son after the father's or mother's death. When there is more than one son, the eldest receives the compensation amount. The problems arise while sharing the amount, which depends on the character of the eldest son; otherwise it will lead to disagreement among brothers.
- In Bihar, a large number of allotted lands has been found under *Ahar Pynes* (traditional water bodies), therefore, the sample beneficiaries cannot cultivate their land. The *ahar pynes* are poorly managed which is directly affecting their crops during the rainy season. It was found that the government too did not show much interest to develop as well as manage the *ahar pynes* system.
- In Lakhimpur (Uttar Pradesh) and Morigaon (Assam) districts, majority of allotted lands are flood affected. In Lakhimpur district, sugarcane is at high risk due to floods, as water logging damages the crop. Majority of respondents revealed that government has allotted them flood-affected areas, which has affected their livelihoods and sources of income. Similarly, in Morigaon district, large chunk of lands allotted under the minimum needs programme are flood-hit areas. The sample respondents revealed that the revenue department has allotted them flood-affected areas and soil erosion had damaged their agricultural land resulting in the loss of investment.
- In the light of field level experiences, at the macro level, there is a need to look into the progress of allotted land. Only allotment of small pieces of land cannot solve the problems of landless families as there will be very little improvement in the living conditions of the allottees. Even after the allotment of land under different

programmes, still many families are landless, whose socio-economic condition is pitiable.

- The amount spent for land levelling and irrigation was more in Uttar Pradesh and Bihar than Assam. A few respondents received one-time institutional help for the development of their land during the allotment, but thay revealed that it was not sufficient.
- In Sivasagar district, majority of sample respondents' farms were utilised for tea cultivation. It is also important to note that the production of paddy in ceiling surplus land is very low, therefore the beneficiaries used for small tea garden. It is a good sign of proper land use in Assam. In Lakhimpur Kheri district, it is a widely held opinion that land surrendered to the State by the landholders was of poor quality, often uncultivated or barren land without water facility. Sometimes lands under tanks, river beds, canals or those more prone to floods were surrounded.
- There is increasing incidences of violence and land grabbing by middleman after the allotment. There is lack of authorised/legalised monitoring system, which prevents the allottees rights and possession over land.
- There is a gap between the reported numbers and land rights secured. Reasons are : (1) Assignment of land is on paper only and the physical possession has not been given; (2) The beneficiaries have been evicted from their lands and (3) Assumption on changing nature of government, *etc*.

Conclusion

- The allotment of land to the poor has not given much support to the rural poor to fulfil their needs. In order to have significant effect on livelihoods as well as poverty eradication and more productive utilisation of resources, efforts should be made to find alternate ways.
- The beneficiaries could get ownership or possession of land if laws were properly implemented in most of the States.
- Re-classification of newly irrigated areas should be undertaken with joint efforts of Revenue Department and Gram Sabhas for bringing these lands within the ambit of various land policy.
- Introducing Card Indexing System for prohibiting fictitious transfers in Benami names, the card system should have co-relation with their Aadhaar Card, Voter ID Card or PAN.
- Distribution of land under various programmes should be in the name of husband and wife on joint basis as it will enable to control the Benami land. The issue of land should go with a built-in clause of gender equity.
- There is an increase in number of cases where landlords create legal hurdles for harassing the allottees to prevent them taking the ownership of the allotted land. It is

found that landowners take full advantage of appeal and revision provisions to defeat the purpose of the Act.

- It is observed that after fighting the case before highest revenue courts, i.e., Board of Revenue, a party can file a civil suit against the order in lower courts and again they can allow the process of appeal and revision. Usually, there has been considerable delay in taking possession of the land by the government, and thus the landowner continues physical possession of such land.
- The weak monitoring system prevents the allottees' rights and possession over land. Therefore, the numbers of atrocities and incidences of land grabbing by middlemen/ agents after the allotment is high. There is a need to focus on monitoring system to provide possession over land to the beneficiaries.
- Cases of illegal or improper allotments of land are to be investigated and allotments to be cancelled - a provision to be made to that effect.
- There is an absence of organisations as well as coordination amongst the officials from village level to centre level. So, the efforts are to be made more transparent and communicable it will be very easy to improve the status of land as well as conditions of allottees.
- Efforts can be made to address the gaps listed to secure the land right to the intended beneficiaries. The State government also can make efforts to start a multi-faceted and decentralised model like Andhra Pradesh project (under the Rural Development Department) that takes a multi-faceted, flexible, decentralised approach with the support of the Revenue Department and community-based organisations. It has brought a new life to the efforts of government to broaden land access by taking advantage of the land-related circumstances unique to each setting, and tailoring programmes to take advantage of specific opportunities.

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AN EVALUATION OF THE SHG-BLP WITH SPECIAL REFERENCE TO ITS LOAN PORTFOLIO AND ASSET QUALITY

Dr. M. Srikanth

Introduction

Microfinance in India is available mainly in two channels viz., i) Micro Finance Institution (MFI) - Bank Model ii) Self-Help Group Bank Linkage Programme (SHG-BLP). Out of these channels, SHG-Bank Linkage Programme has become more popular in India than elsewhere in the world primarily due to its widespread adoption by Scheduled Commercial Banks, Regional Rural Banks and Cooperative Banks (Singh, 2008). SHG-BLP is a landmark model initiated by the National Bank for Agriculture and Rural Development (NABARD) in 1992 to deliver affordable doorstep banking services and largely achieved the stated goals of financial inclusion; it is a home-grown self-help movement with an objective of creating sustainable livelihood opportunities for the rural poor (Srikanth and Reddy, 2017). Started as a bank outreach programme, SHG-BLP transcended itself into a holistic programme for building financial, social, economic, and of late, technological capital in rural India (NABARD, 2018).

Till 31st March, 2018, the SHG-BLP trod many a milestone with a total membership of 87.44 lakh groups (covering nearly 11 crore households) across India; the SHGs mobilised a total deposit of Rs. 19,592 crore from its members as on 31st March, 2018. The programme has made an indelible mark on the Indian financial landscape by extending collateral-free loans (without specifying any purpose or activity or project) to Rs. 50.20 lakh SHGs to the extent of Rs. 75,598 crore as on 31st March, 2018. It is interesting to note that 90.62 per cent of these members are the women (NABARD, 2018). There are more than 100 Scheduled banks, 300 District central cooperative banks, 27 State rural livelihood missions, and over 5000 Non-Governmental Organisations (NGOs) as channel partners in the SHG-BLP.

Though the SHG-BLP was intended as a 'zero non-performing asset movement', bad loans have been mounting up in the recent past due to various reasons. Over time, bad loans increased partly due to microfinance crisis in Andhra Pradesh (undivided State) during 2009-10 (Raj, 2012); and partly because of subsidy component through Swarnajayanti Gram Swarojgar Yojana (SGSY) (Karmakar, 2009) and loan waivers.

It is a cause for great concern, i.e., escalating gross non-performing assets (GNPAs), which peaked to a record high of 7.4 per cent in the FY 2014-15, and later slightly reduced to 6.12 per cent as on 31st March, 2018. In relative terms, the southern region had higher portion of savings (62.05 per cent) as well as credit (76.23 per cent) and lower level of non-performing assets (4.46 per cent) when compared to other regions as on 31st March, 2018 (NABARD, 2018). As SHG-BLP is rapidly spreading its wings in other regions, the evaluation of performance of the SHG-BLP in terms of quality of the loan portfolio and the main reasons

behind the growing NPAs is very essential for sustaining the SHG-BLP model. In this context, CEDFI has taken up the research project, 'An Evaluation of the SHG-BLP with special reference to its Loan Portfolio and Asset Quality' funded by NABARD.

Objectives

- To compare and contrast the quality of lending portfolio of the SHG-BLP of various States/regions in the country in general and AP, MP and Odisha in particular
- To study the factors behind mounting NPAs in SHG loans, including National Rural Livelihoods Mission (NRLM) loans
- To assess the impact of SHGs' access to credit on the income generating capacity of their members in general, and the poverty alleviation in particular
- To critically evaluate the sustainability of the SHGs based on the perceptions of their stakeholders
- To recommend policy prescriptions for laying the roadmap for the future.

Methodology

The study relied on primary as well as secondary data and used both quantitative and qualitative data techniques. Also, a few case studies are collected from the field, presenting the success stories as well as key learning points. The primary data was collected through two different sets of schedules/questionnaires: a) from members of the SHGs and b) from bankers, SHPIs/NGOs, and other line department officials of respective State governments. The schedules/questionnaires were collected from respondents comprising 663 SHG members and 58 stakeholders.

Study Area

The States of Andhra Pradesh, Madhya Pradesh and Odisha.

Findings

- The study found that 41 per cent of the sample population is illiterate, 34 per cent studied up to 5^{th} standard and 20 per cent studied up to 10^{th} standard. Only 5 per cent of the SHG members studied beyond 10^{th} standard.
- Overall, 70 per cent of the sample members are associated with the SHG-BLP for more than five years in the three study States.
- A little over one-fourth of the sample population received only one loan and 16.8 per cent received four or more than four loans from the SHG-BLP.
- Nearly one-third of the sample availed loans of above Rs.40,000 from the SHG-BLP.
- Five out of every six respondents of the sample reported that the services are smooth and user-friendly.

- After joining the SHG-BLP, 87.3 per cent of the respondents are able to satisfy their most basic needs like roti, kapada aur makaan (food, clothing and shelter).
- The average monthly income of the sample increased from Rs.773 to Rs.2,081 (by 169.3 per cent) after joining the SHG. In a similar fashion, the annual expenditure on their children's education, healthcare, consumer durables and saving increased. They have enhanced their income generating activities like agriculture, cattle rearing, petty business.
- Around 63 per cent of the respondents felt that the loan amount was sufficient.
- Nearly five-sixth of the respondents (84.5 per cent) have not repaid the loans taken from the SHG-BLP as per the repayment schedule and cited poor economic conditions, non-cooperation/non-repayment by other members of the SHG, expenses towards marriage/ceremony, medical emergency, and expectation of loan waiver from the government as the main factors behind the unhealthy growth of NPAs. Natural disasters, family disputes in respect of financial matters, and lack of proper follow-up from banks were also found out to be the major reasons behind the NPAs.
- According to the stakeholders, migration/death of SHG members (79.3 per cent) expectation of loan waiver (77.6 per cent), non-cooperation from the group members (72.4 per cent), expenditure towards non-economic activities (67.2 per cent) and family problems (60.3 per cent) were the main factors behind the growth of NPAs in the SHG-BLP. In addition to these, nearly half of the stakeholders (48.3 per cent) voted for 'multiple sources of loans' as one of the main reasons behind the NPAs. The other reasons contributed to NPAs in the SHG-BLP were poor record-keeping (43.1 per cent), financial illiteracy (41.4 per cent) natural disasters (37.9 per cent), and inadequate peer pressure (63.8 per cent), to mention a few. More than 60 per cent of the stakeholders felt that the training given by SHPIs/ NGOs was inadequate and hence, there is a need to improve the training and capacity building activities.
- The results of the regression model, significant variables (contributors to GNPAs in the SHG-BLP) based on secondary data are as follows:
    1. Average loan size per SHG (significant @ 10 per cent level)
    2. Outstanding loan amount of the SHG-BLP (highly significant @ 1 per cent level)
    3. Gross State Domestic Product (highly significant @ 1 per cent level)
    4. Poverty rate (significant @ 5 per cent level).

Conclusion

The SHGs are more than just a conduit for savings and credit; they also act as a delivery channel for numerous services such as skill development, training on entrepreneurial activities, acting as a launch-pad for creating social networks, access to a range of financial services (pension, insurance and remittances) in order to achieve lofty goals of financial inclusion, social empowerment of the poor and gender equity.

Though the SHG-BLP achieved many a milestone during the last two-and-a-half decades, it accumulated huge NPAs in the last few years, and there is every reason to arrest this trend and make the SHG-BLP a noble and sustainable model to eradicate poverty in India and achieve the SDGs.

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TIME AND WORK (TAW): STUDY FOR PR FUNCTIONARIES IN INDIA

Dr. C. Kathiresan
Dr. Vanishree Joseph

Introduction

In view of multiplicity of flagship programmes where Gram Panchayats (GPs) have to play a major role for coordination and supervision, the increased flow of funds has added more and more functions/responsibilities to GPs. There was no assessment as to the workload on the GP staff because of such expansion of roles and responsibilities. Therefore, the Ministry of Panchayati Raj (MoPR) had requested NIRDPR to conduct State-specific assessment of human resource needs for Panchayats starting with GPs to take care of the workload of GPs in different State contexts.

Objectives

i. Identify clearly formal and informal functions and role played by GPs in different States

ii. Assess the existing human resources available, determine how much work can be got done through efficiency and increased through:

   a. Capability building of staff

   b. Simplification of processes and procedures through re-engineering

   c. Introduction of ICT

iii. Identify works that can be done through proper outsourcing

v. Identify works for which additional human resource is absolutely essential

vi. Identify the required qualifications of the additional human resource, their mode of recruitment, the tasks to be performed by them and their probable career path and

vii. Additional costs required and possibilities of meeting these costs innovatively.

Methodology

Based on the discussions in the Technical Advisory Group, NIRDPR had worked out a detailed methodology for conduct of "Time and Work" study to prepare the tools and test the methodology by organising two pilots with the help of Institute of Rural Management (IRMA), Anand, Gujarat and Centre for Social and Economic Studies (CESS), Hyderabad in two different States, namely Gujarat and Telangana. The pilot studies were conducted with the following objectives.

i. Development of methodology and tools for mapping the core functions and core staff at the GP (GP) level.

ii. Estimate actual human resource required to carry out the assigned tasks for de-jure and de-facto functions carried out by the GP.

iii. Identification of activities which can be simplified or automated by available technology application; legitimate outsourcing to SHGs or chartered accountants or to village level entrepreneurs; how much can be accelerated by proper training and capacity building.

Study Area

Pan India study except UTs

Findings

Each State has adapted their own strategy to devolve functions to the Gram Panchayats and all the functions were entrusted to the elected representatives who in turn implement them with the help of different functionaries. Analyses across 22 States have shown that the basic governance function remains same for all the States except Mizoram. As enshrined in the Constitution, conducting Gram Sabha is mandatory and all the States have responded positively and assigned this function to the Gram Panchayat. Similarly, conducting Gram Panchayat meeting is an important task of the Gram Panchayat in all the States. In the recent years, because of the initiatives taken by the Ministry of Panchayati Raj, preparation of Gram Panchayat Development Plan has gained momentum in all the States. Even though its impact in the development process is not yet gauged, the measures taken by the Gram Panchayats in the study area across the States are laudable. Kerala serves as the model for other States through its People's Plan Campaign in the preparation of GPDP. But, still in the sample Gram Panchayats of Goa and Mizoram, the GPDP activity is yet to pick up.

The other governance functions like preparing shelf of projects, GPDP implementation and monitoring, annual budget preparation, maintenance of essential statistics of the village, administrative functions of the Gram Panchayat, formation of various committees, and conducting meetings of the Gram Panchayat committees are prevalent in all States except Mizoram. Maintenance of essential statistics, which are considered as vital to measure development, is not done by the Gram Panchayats in Jharkhand, Uttar Pradesh, Uttarakhand and Tripura. If Gram Panchayat becomes the nodal office for providing various data on social and economic development, preparation of plan and the measurement of development progress can be done effectively.

Other than providing civic amenities, Gram Panchayats have to perform the functions of monitoring institutions like anganwadis, schools, PHCs, and fair price shops located within their territory for ensuring the fair and efficient service delivery of those institutions. Also, they have to prevent atrocities and protect human rights of the citizens. Moreover, when there is vagaries of natural calamities and disaster, Gram Panchayats have to provide relief and rehabilitation to people those who are affected.

Hence, it is not just the provision of drinking water supply and maintenance of street lights but also wider range of other developmental, protection and rehabilitation functions

awaiting to be performed by the Gram Panchayats across the country. Monitoring of institutions are done by Gram Panchayats in all the States. But, prevention of atrocities and relief from natural calamities are neglected in the States of Jharkhand, Maharashtra, Rajasthan, Uttar Pradesh, Bihar, Haryana, Telangana, Manipur and Assam. Regarding self-reported workload, secretary has the highest workload (252.6 days) followed by gram rozgar sahayak (178.3 days), clerk (165.8 days) and computer operator/bill collector (120 days). The time study conducted by the researchers of this study found them to be 222.1 days for secretary, 190 days for gram rozgar sahayak, 183.3 days for clerk, and 213.5 days for computer operator/bill collector. The difference between observed and self-reported workloads might be due to more (or less) workload on the staff member on the day(s) when they were observed by the researchers. In any case, none of the staff member, on overall basis, is having excessive workload.

However, there are large variations on workload of these staff members across the States. GP Secretaries in Bihar, Madhya Pradesh, and Tamil Nadu reported workload of more than 300 days, while it is more than 250 days in the case of Andhra Pradesh, Jharkhand, Punjab, Rajasthan, and Uttar Pradesh. In the case of observed workloads on GP Secretaries, more than 250 days are reported only in the case of Telangana, Punjab and Jharkhand. Regarding other employees, none of them have workload exceeding 250 days a year or more except in the case of computer operator/bill collectors in Telangana, Tamil Nadu, and Jharkhand. A similar workload trend is observed in the case of other GP staff members from the different State reports.

These results suggest that GP staff are not overworked except perhaps the GP Secretary. The lack of excessive workload does not mean that they do not have additional work to do. It perhaps indicates that that they are not putting in extra amount of effort.

Recommendations

i. Some of the functions of the GPs are curtailed by the legal constraints or mandate of other departments as in Punjab. Hence, there should be a mechanism for avoiding such constraints.

ii. The strategies for interventions on the issues of vulnerable communities, drinking water, and waste management need to be formulated. The activities under waste management can be outsourced completely.

iii. Proper responsibility mapping of the secretary and other functionaries to be done keeping in view of managerial and supervisory functions. The role of secretary to be re-defined, confining to the managerial functions. The supervisory functions entrusted with the secretary to be devolved to the supervisory cadres to reduce the workload of the secretary.

iv. A new post of plan clerk may be created by replacement of one existing post of a clerk for effectively managing the planning process.

v. There is a dire need to introduce pre-service and in-service training as mandatory. The

Directorate of Panchayat (DoP) needs to maintain a database on capacity building of functionaries and monitor their training vis-à-vis performance continuously.

vi. Soft skills may be one of the compulsory topics in the training programmes for Panchayat functioning.

vii. The career path may be re-defined on performance basis rather than promotion by default.

viii. The outsourcing areas identified by the study may be seriously considered and a mechanism may be put in place for the same.

ix. The GPs are already in the e-governance mode, but still continue with paper-file system too. Hence, complete office automation may be seriously thought of for the efficient office functioning. For this, existing functional software may be integrated. Finally, this should lead to 'Paperless Office'.

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STUDY ON DELIVERY OF PUBLIC SERVICES BY GRAM PANCHAYATS AND VILLAGE COUNCILS

Dr. C. Kathiresan

Dr. Vanishree Joseph

Objectives

i. To understand types of basic services incorporated in Right to Public Service Guarantee Act across 14 States

ii. To study time taken, cost, and quality of the services provided at grassroots level by the GPs/VCDC and line departments

iii. To understand the level of willingness of the citizens to pay cost of the services

iv. To understand use of e-Panchayat applications for delivery of services

v. To assess availability and performance of the human resource functionaries at grassroots level for strengthening practice of delivery of the services

vi. To study effectiveness and perception of the citizens utilising services under the Act

vii. Make suitable recommendations for effective delivery of public services by the GPs.

Methodology

States representing different parts of India were selected. The following five criteria were used to select States: States that have PESA districts/villages, States that have non-PESA districts/villages, States having Autonomous District Councils and Village Councils, Schedule VI States, and States that received significant grants from XIV Finance Commission. Based on these criteria, 14 States were selected. In these States, the districts were selected using HDI value - low and high. GPs were selected ensuring that the selected GPs include PESA and non-PESA GPs, and ADCs and VCs in Assam and Tripura, and the total sample comprised 14 States, 28 districts including 2 ADCs; 28 Blocks/Mandals; and 56 GPs, including 4 VCs.

Study Area

Assam, Jharkhand, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Rajasthan, Sikkim, Telangana, Tripura, Uttar Pradesh and West Bengal.

Findings:

Services provided by the GPs varied considerably across the States. Out of 34 services, as many as 20 services were found to be accessible/available to the citizens either as and when they are required or as per scheduled timings. These included hand pump water, trade licenses, ration shop, and education, services like issue of ration card, land revenue records,

allotment of (inclusion in) BPL list, and crop insurance had ratings of 1 or 2 thus averaging less than 2, which indicates that these services are accessible/available as per specified timings. Services relating to sanitation like liquid waste management, removal of carcasses, reclaiming unhealthy localities, spraying disinfectants were found be not taken up as frequently as required. Services provided through other line departments like health, education, trade licenses, and ration shops were found to be providing better services. Services provided by GPs themselves like those related to sanitation were found to be provided infrequently. Supply of basic services were perceived to be about average across the States, except those relating to sanitation. These results confirm the importance given to sanitation through Swachh Bharat Mission by the Government of India.

Recommendations:

i. There are large variations in terms of cost and time for delivery of services across the States. These variations may be due to the local conditions for sourcing and providing services like drinking water

ii. There are some services which are free in a few States and charged in other States

iii. Researchers and policymakers have observed that free services are not valued, and hence suggested providing such services recovering at least the operational cost

iv. There are still some services that need to be provided free of cost, and few other services that need to be provided with minimum possible charges being sought by the vulnerable sections of the society

v. All the charges need to be revised from time to time using cost of living index,

vi. The standards suggested are to be considered as desirable standards, which may be included in the Citizen's Charter

vii. There are some States which exceed these standards, and many which are far below from these standards

viii. It is recommended that all the States may, over a time frame of 3 to 5 years, move towards these standards

ix. If technology is properly adopted, these standards perhaps can easily be exceeded providing many of these services online on real-time basis.

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ROLE OF SERVICE SECTOR IN EXPANDING PRODUCTIVE EMPLOYMENT OPPORTUNITIES IN RURAL INDIA

Dr. Partha Pratim Sahu

Shri Manik Kumar

Introduction

Generation of adequate employment opportunities at rising levels of productivity is one of the persisting developmental challenges in India, which remain unresolved even after nearly three decades of economic reforms and high growth rates. Rural India, in particular, has been witnessing both qualitative and quantitative employment challenge, which is even more severe than urban India. With shrinking livelihood opportunities, especially in rural areas, agricultural workers are being pushed out of agriculture and there is severe distress-driven out-migration. Therefore, there is an urgent need to generate employment and/or entrepreneurial avenues in the place of residence, which will ensure higher productivity, secured and sustainable livelihood for rural people. The available employment data suggests that all board sectors the rural economy are either witnessing negative employment growth or varying degrees of slowdown. However, few constituents of rural non-farm sector are growing, albeit, slowly. Employment share in rural service sector has increased from 11.4 per cent in 1993-94 to 19.8 per cent in 2017-18 and few of its sub-sectors (i.e., trade, hotel, transport-storage and other services) have registered positive employment growth rates. Nearly one-third of the rural income is generated in the services sector and demand for various services has also increased significantly over the years. In view of these developments, it is important to assess the role and potential of service sector in generating productive employment in rural India.

Objectives

The objectives of the present study are as follows:

i. To analyse the size, structure and growth of the rural services sector both at the aggregate (national) and disaggregate (State) levels;

ii. To examine the nature and quality of generated in the services sector and trends in employment growth, by enterprise type, location and gender;

iii. To identify growing and declining segments of rural services sector so as to assess the impact of the economic reform process on employment and productivity performance of rural services sector and its constituents.

iv. To assess the constraints faced by the rural services sector enterprises; and

v. To suggest policy measures towards expansion of employment in the sector and improvements in the quality – productivity, earnings and social security – of jobs in the rural services sector.

Data Sources and Methodology:

The present study is primarily based on data obtained from the secondary sources. Two rounds of surveys on Unincorporated Non-agricultural (Excluding Construction) Enterprises in India, for the period 2010-11 and 2015-16, have been used intensively to understand the role and potential of employment generation in services sector from the perspective of enterprise development. Non-agricultural enterprises, which are not incorporated (i.e., registered under the Companies Act, 1956), were covered in the survey. Further, the domain of 'unincorporated enterprises' excluded (a) enterprises registered under Sections 2m(i) and 2m(ii) of the Factories Act, 1948 or bidi and cigar manufacturing enterprises registered under the Bidi and Cigar Workers (Condition of Employment) Act, 1966, (b) government/public sector enterprises and (c) cooperatives. Thus, the coverage was restricted primarily to all household proprietary and partnership enterprises.

In addition, Self-Help groups (SHGs), Private Non-Profit Institutions (NPIs), including Non-Profit Institutions Serving Households (NPISH) and Trusts, were also covered. The said database is unique and provide information on a variety of enterprise and entrepreneur characteristics for enterprises operating in manufacturing, trade and other services located in rural and urban locales. The study methodology followed here is very simple and straight forward, i.e., methods of 'description', 'understanding', 'reduction' and 'disaggregation'. The analyses have been carried out for each of the two distinct enterprise categories, namely Own Account Enterprises (OAEs) and Establishment. The study undertook analysis at two-digit levels of industrial classification, covering five trade related services and 15 other services (i.e., transportation, communication, entertainment, health, education, public services and so on). In order to identify specific locational constraints (and advantages, if any) of rural enterprises, analysis have been carried out separately for rural and urban units. An important exercise to identify the 'growing' and 'declining' sub-sectors was carried out at the two-digit level of industrial classification for three variables, namely number of enterprises, number of workers and per worker productivity.

Key Findings

In rural India, during 2015-16, 32.5 million non-agricultural enterprises were operating, of which 65 per cent constitute the service sector enterprises. Out of 21 million service sector enterprises 90 per cent were own account (one person/solo) enterprises. Just five sub -sectors (i.e., other retail trades, Land transport, community, social and personal service activities, food service activities, and financial service activities) constitute more than 80 per cent of enterprises. Thus, there is very little diversification or it also indicated concentration of enterprises in every industry group. About 8 per cent of these enterprises are owned by females (5 per cent in OAEs and only 3 per cent in bigger sized enterprises). Thus, the share of women-owned enterprises declined moving along the scale ladder. Women-owned enterprises are relatively higher in trade related enterprises. Further, the share of

female-owned enterprises remained stagnant during 2011-16. The ownership pattern by social groups indicates that SCs and STs owned disproportionately low share and are mostly concentrated in tiny enterprises (OAEs). The enterprise owned by SCs and STs are insignificant or very low except in retail trade and land transport. About 38 per cent of rural service sector enterprises do not have bank account. Sadly, 85 per cent of these enterprises reported of not maintaining their business accounts. About 45 per cent of these enterprises reported of stagnant or contracting in terms of their growth performance. The access to computer is also very insignificant, i.e., only 6 per cent use computers. However, there are significant variations in enterprise ownership among marginalised groups across type and location of enterprise, scale of operation and a host of other characteristics.

In 2015-16, rural service enterprises sector employed 31 million (16 million in trade and 15 million in other services). In rural areas, about 52 per cent of employment is contributed by trade and the rest 48 per cent is by other services. While analysing by size of enterprises, about 59 per cent of OAE employment is contributed by trade and 27 per cent of employment in establishment segment. The overall employment growth witnessed a negative (-1.3 per cent) trend, but trading related services registered a positive of less than 1 per cent (0.8 per cent). The other services witnessed huge decline of -4.7 per cent. The disaggregated analysis also presented a mixed picture. The distribution of both employment and enterprise at two-digit level of industrial classification are skewed. In 2015-16, the top five industry groups, i.e., other retail trades, other community, land transport, food service activities and other wholesale trade together constituted 91 per cent of total employment in OAEs segment.

Similarly, in bigger sized enterprises, education, other retail trade, land transport, food service activities, administrative, etc., together constituted 78 per cent of total employment. We do not see major reshuffling during the five-year study period. Thus, in establishment segment, the employment is relatively better diversified, as compared to OAEs segment. The employment growth scenario at two-digit level of industrial classification suggests that a large number of industry group witnessed varying of slowdown or negative growth rates. In OAE segment, many industry groups such as financial service activities except insurance and pension funding, other financial activities, support activities for transportation, postal and courier activities, water transport, land transport, information and communication, activities of commission agents, human health and social work, professional, scientific and technical activities, other community, social and personal service activities, other wholesale trade and so on registered negative growth rates during 2011-16.

Rural service enterprises sector not only witnessed quantitative employment challenges but also qualitative challenges in terms of access to women, incidence of part-time employment and levels of worker productivity. The share of women in total employment is low and limited to very few industry groups. In 2015-26, the top five industry groups with high share of women employment in OAE segment were financial service activities except insurance and pension funding, education, food service activities, other retail trade, and

activities of commission agents. In many other industry groups, the share of women employment is insignificant and have remained constant during the study period. The increase in total employment needs to be analysed by its nature and composition. Since the incidence of part-time employment, which is not so secured and remunerative, has increased in many industry groups in OAE and establishment segments, the overall growth of part-time employment has declined. The decline in part time employment, however, did not reflect a better employment scenario, as the overall employment growth rate has declined.

The regional employment growth scenario is also not so encouraging. In as many as nine major States (i.e., Andhra Pradesh, Haryana, Jammu and Kashmir, Kerala, Maharashtra, Odisha, Tamil Nadu, Uttarakhand and West Bengal), employment witnessed varying degrees of setbacks in case of rural own account enterprises. Similarly, rural establishment employment declined in four major States except UT's and North Eastern States, i.e., Andhra Pradesh, Jammu and Kashmir, Punjab and Uttarakhand. Rural OAEs witnessed severe employment setback as compared to establishment segment. Surprisingly, many industrially developed States such as Maharashtra, Andhra Pradesh and Tamil Nadu witnessed varying degree of negative employment growth. Factors underlying regional and temporal variations in these respects have also been explored but not to the extent one would expect. A more detailed analysis is thus called for to understand, assess and explain the underlying factors for such trends and patterns observed in the rural services sector.

Low and declining levels of per worker productivity is another important indicator to reflect on the qualitative employment challenges. Standard structural coefficients such as per worker productivity and capital-labour ratio provide considerable insights into the relative efficiency of enterprises. Our analysis suggests that the levels of per worker productivity is low and has largely remained stagnant in real prices. However, there are variations by size, scale of operation, ownership pattern, industry groups and a host of other enterprise characteristics. But overall, the enterprises are operating at a very subsistence level and we do not see a graduation or scale up path for them.

A more detailed industry-wise analysis is essential to arrive at a better understanding of the implications of various factors on economic performance of these service sector enterprises. It would also be interesting to identify situations in which the conditions of these enterprises would improve, both in terms of earnings and employment generation. Success in addressing their productivity improvement and employment generating capacity will depend to a large extent on providing an enabling environment. There are large number of constraints these enterprises face while operating their enterprises. The fall in demand, and non-availability of credit and non-receipt of financial dues are reported to be the main constraints for the service sector enterprises to operate and expand.

Conclusion and Way Forward

Let us recapitulate the main findings of the present study. The study identified the rising and falling of service sector enterprises in terms of their employment share and growth. The study also highlighted the qualitative employment challenges in terms of access to women and the incidence of part-time employment. The study found that within the rural non-farm sector, the services sector is emerging as an employment provider in rural economy. Within the services sector, retail trade, land transport, community, social and personal service activities, food service activities and financial service activities constitute about 80 per cent of the total employment. However, women's share in total employment is very minimal in many of these segments, and the incidence of part-time employment is also rising over the period. The study observed significant variations by size, location, ownership type and host of other enterprise-specific attributes. The fall in demand, non-availability of credit and non-receipt of financial dues are reported to be the main constraints for the service sector enterprises to operate and expand.

The existing data sets, however, cannot address many other aspects that need to be probed for a well-informed and fact-based policy for promotion of service sector enterprises. Therefore, either several categories of information need to be included in the existing data sources or new comprehensive databases need to be developed. Examples of information that needs to be provided are how they started and what are the constraints to start and run the enterprises; how they responded to technology-intensive industrialisation and growth during the globalised regime; how they responded to economic slowdown during demonetisation, GST or the current pandemic-led lockdown; the constraints faced by these enterprises while operating in the domestic market and tapping new markets; and their access to formal institutions in credit, technology, market, skill, and training. Additional data is required, however, for probing these issues at the sub-State level. We hope that others will take up where we have left off, assembling and analysing new data sets, if any.

Given the immense potential of employment generation in the service sector enterprises, besides finance and marketing, customised skill and capacity development programmes need to be designed, keeping rural women and youth in mind. Continuous and long-term handholding and mentoring to both aspiring and existing entrepreneurs will also be vital to put these enterprises on a scale ladder, which will generate employment in medium and long terms. The existing non-farm livelihood programmes under NRLM, including the Start-up Village Entrepreneurship Programme (SVEP) need to be leveraged in this direction. National-level institutes, which are responsible for training and capacity development, such as NIRDPR, must design customised or tailor-made programmes by keeping in mind, the diverse need of various stakeholders and clientele. While designing entrepreneurship support programmes, it is also important to include initiatives to help entrepreneurs cope with the psychosocial aspects, stresses and conflicts inherent in risk-taking.

As a way forward, the Gram Panchayat Development Plan (GPDP) can play a direct role in identifying sectors, sub-sectors and activities by their respective business potential and

devise a mechanism to prioritise resource allocation and help in overall direction of policy towards the achievement of a holistic rural development - entrepreneurship and livelihood avenues could be one of them. While undertaking the monitoring and evaluation of various livelihood and entrepreneurship development programmes under the Ministry of Rural Development and its departments, a checklist of questions could be addressed to different authorities, agencies and ministries in respect of the intervention area. To illustrate a few: whether entrepreneurship promotion a central objective of the programme; what is the nature and extent of entrepreneurship and livelihood generation envisaged in the programme; what are the major constraints in creating the envisaged entrepreneurship development; is it sustainable; and so on. Thus, Gram Panchayat Development Plan (GPDP) could be truly an effective tool to mainstream entrepreneurship and livelihood challenges in the rural development strategies and overall economic policies.

The overall enabling environment relating to policy, incentive structures, and improvements in vital physical and institutional infrastructure (power, transport, and information network), access to better credit, training and skill and effective regulatory mechanism will be crucial to improve the overall performance of services sector enterprises and its employment generating capacity.

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PSYCHOSOCIAL HEALTH OF WOMEN LIBERATED AND NON-LIBERATED FROM MANUAL SCAVENGING IN INDIA

Dr. Lakhan Singh

Introduction

Manual scavenging is one of the caste-based occupations in India which is socially degraded, undignified and inhuman work of cleaning human excreta manually. This inhuman practice still persists in various parts of the country. It arises mainly due to continuing existence of insanitary latrines and a highly iniquitous caste system. This work is mainly performed by the particular members of Dalit communities who face different types of discrimination and deprivation from society.

Moreover, review of literature reveals that more than 90 per cent of people who are engaged with this occupation are women who are subjected to face layers of discrimination and stigma because of stiff societal norms and values positioned against them. Thus, the burden of discrimination and stigma on women is much higher compared to men.

Majority of studies and interventions in area of manual scavenging have been related to socio-economic issues. However, in addition to socio-economic issues, manual scavengers also face discrimination, rejections, and stigma from society, which leads to poor psycho-social health in them. There are hardly any studies on psycho-social health of manual scavengers in India to find whether there is any difference in psychosocial health of manual scavengers who have been liberated and one who are still engaged with this occupation. More so, female manual scavengers, who being a woman and Dalit, face double layers of discrimination and rejection compared to men, and thereby are more vulnerable to poor psychosocial health. Hence, the present study has identified the gaps and need for carrying out research on this subject.

Objectives:

i. To study the socio-demographic and economic condition of the households of women liberated and non-liberated from manual scavenging,

ii. To examine the psychosocial health of liberated and non-liberated women from manual scavenging, and

iii. To analyse the impact of liberation on psychosocial health of female manual scavengers.

Methodology

To achieve the set objectives, the present study was conducted in Maharashtra and Madhya Pradesh where the number of manual scavengers was higher than other States. Due to non-availability of reliable and updated data on numbers of manual scavengers with district officials, a decision was taken to select study area through help of civil society organisations who were already working for the betterment of manual scavengers. Hence, a slum area in Nagpur district of Maharashtra and a cluster of villages in Raisen district of Madhya Pradesh were selected. A total of 235 women, including 110 non-liberated and 125 liberated women, were systematically selected from the study area.

Keeping in view the objectives and hypothesis of the study, the analytical framework was prepared. The objectives of the study were mainly based on quantitative data, however, a few of in-depth interviews and field observations were also made to substantiate the quantitative findings. The statistical analysis was carried out through statistical software - SPSS Version 19.

In addition, qualitative data was also used to substantiate the findings of quantitative data. Likert's five-point scale was constructed using questions on social well-being and psychological problems to measure psychosocial health of women. The reliability of the scale was verified through Cronbach alpha value.

Findings

- All the women belonged to Hindu religion and Scheduled Caste. Moreover, they belong to Mehtar or Balmiki sub-caste category. Majority of members of both the households were in working age group. But percentage of population above 60 years was as low as three per cent which shows high incidence of mortality among them due to their non-stop involvement in manual scavenging work. The overall sex ratio in the study area was not in favour of females, i.e., 900 per 1000 males.
- According to wealth index score, none of the of the non-liberated households falls under poor category; in contrary to this, 62 per cent of liberated households were from poor category. The main reason of poverty of liberated households was that due to their caste identity and their previous involvement with manual scavenging, no other jobs were available for them.
- As far as education of the household members is concerned, the results were very discouraging and hardly anybody has completed higher education. Education attainment among children was also found poor among both households but educational status was little better among non-liberated children.
- It was observed that the percentage of children attending school decreases as their age increases in both types of households. The prime reasons cited for dropout of children were casteism, high cost, financial problems, long distance from school and the notion that education was not necessary for girls. Majority of children who stopped attending school were either helping their parent in manual scavenging or involved as agricultural labour.

- As high as 20 per cent women of the study area were widowed and reported that their husbands were involved in manual cleaning of sewer system and drainage which made them physically weak that ended up in alcohol addiction.
- Educational status of the women was very low; the average years of schooling among the women of the study area was only five years. It was shocking to know that 40 per cent and 16 per cent of liberated and non-liberated women, respectively, had been forced to join this profession before turning 18. The age at marriage was also observed to be very low; almost half of the women got married before the legal age of marriage (18 years). Fifty-six per cent of mothers reported that they continued working as manual scavengers till the nine months of pregnancy. Of them, 83 per cent reported health problems and 13 per cent reported about loss of their child during delivery.
- At workplace, majority of respondents reported facing untouchability by their employers and society. Further, it was reported by 84 per cent of non-liberated women that they have not been provided any type of protective gears by their employers while at work. In addition to women, children were also subjected to several types of discrimination at schools by teachers and classmates. The main reason cited by majority of the liberated women, who had left the manual scavenging in last five to six years, was the aggressive campaign under the Swachh Bharat Abhiyan.
- It was discouraging to know that knowledge and awareness of government schemes and programmes related to manual scavenging was not known among respondents. It was also reported by respondents that only 24 per cent of liberated and only one per cent of non-liberated women had received help from government under rehabilitation programmes.
- It was observed that the current health status was better in liberated women than non-liberated women. As expected, liberated women faced more health problems than non-liberated women, as they were still continuing manual scavenging work. While it was observed that health seeking behaviour and utilisation of health services was better in non-liberated women than liberated.
- To understand psychosocial health of women two types of psychological scales — social well-being and psychological health using a 5-point Likert scale — were developed. Social well-being was measured by using 12 statements on five domains of social networking (cultural and religious activities, social gathering, economic activities, political participation and government policies) to understand the perception of the respondents on how society behaves with them. To understand how women perceive their psychological problems, 23 statements related to psychological problems (stress, anxiety, confidence level, helplessness, depression, and insecurity) on a 5-point Likert scale were selected. Although statistical analysis revealed that the social well-being was significantly better in non-liberated women than liberated women, quite a high percentage of both liberated (77 per cent) and non-liberated women (50 per cent)

expressed not having good social well-being. As far as psychosocial health of women is concerned, the result showed no difference between liberated (81mean score) and non –liberated women (77 mean score). This means that both liberated and non-liberated women of the study area were almost equally suffering from psychological problems in their day-to-day life irrespective of their liberation status. A combined analysis to understand psychosocial health of women was also done by using the scores of women on social well-being and psychological health scale. Statistical analysis shows that the overall psychosocial health was significantly better in non-liberated women than liberated women which was opposite to the study hypothesis. This highlights that the liberation from manual scavenging has no association with psychosocial health of women.

Conclusion

It was observed in the research that the social, economic and demographic conditions of non-liberated women were significantly better than liberated women due to the advantage of residing closer to Nagpur city where accessibility to jobs, schools, health facility and exposure to mass media/day-to-day life was better than rural areas of Raisen district of Madhya Pradesh. However, the dropout ratio, unemployment among youths, burden of diseases, high expenditure on health, low awareness on schemes/benefits of the government, discrimination from employer and society people were reported both by liberated and non-liberated women.

The psychosocial health of women was measured by their combined scores on social well-being and psychological health scales. Contrary to the hypothesis, social well-being of non-liberated women was found better than liberated women as discrimination and casteism in urban areas are not at as open as in rural areas.

However, with regard to psychological health, both types of women, irrespective of their liberation status, were found having poor psychological health. For example, more than 85 per cent of women complained of suffering from stress and anxiety problems. In most of the households, women is the single breadwinner and their concerns about the future of the family have generated stress and anxiety. The overall psychosocial health, which is a combined score of social and psychological health, was found better in non-liberated women than liberated women. This finding was opposite to the hypothesis and therefore, the study concludes that liberation from manual scavenging alone does not amplify that their psychosocial health will be better.

By demolishing insanitary latrines, the Swachh Bharat Mission has helped women to come out of the inhuman practice of manual scavenging. However, it would have been better if SBA had coordinated with the Ministry of Social Justice & Empowerment and Ministry of Rural Development in providing them ensured livelihood instead of leaving them jobless.

It is suggested that all women, who have left and who still engaged with manual scavenging, must be brought under the National Rural Livelihoods Mission and through formation of self-help groups, they can start their own enterprises. Unemployed youths should be registered under DDU-GKY to get training on employable skills. Efforts should be made to bring the dropout children back to schools and all of them must be covered under post-matric scholarship. Unless the human intervention in sanitation-related jobs is replaced by mechanisation, it is near impossible to abolish manual scavenging. Hence, mechanisation in sanitation-related jobs is the need of hour and humanitarian approach is required for their holistic development.

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EXAMINATION OF THE REASONS FOR THE FAILURE TO PREPARE DISTRICT PLANS AND IMPLEMENT THEM - LEARNINGS FOR POLICYMAKING

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Introduction

District Planning is the process of preparing an integrated plan for the local government in a district, taking into account the resources available and covering the sectoral activities and schemes. Decentralised planning comprises different planning units, namely District Panchayat, Block Panchayat and Village Panchayat, municipalities, line departments and parastatals would prepare plan for execution of each of their functions and responsibilities after consultations with people. Its aim is to arrive at an integrated, participatory coordinated idea of development local area. It is a two-way interactive exercise, with the district being viewed as a convenient local area. Government of India has made many vital efforts to implement the spirit of 73rd Constitutional Amendment by requesting the States to devolve the prescribed functions to the local government to fulfil the basic services of the people, and usher the development through participatory planning at the grassroots and making consolidation at the district level through convergence of line department schemes. But in reality, the performance of local bodies and planning process at the district level could not able to prepare real integration and convergence due to various reasons. Therefore, this study was proposed and made attempt to find reasons on varied status of plan preparation and problems for failure of district planning.

Objectives

i. To assess the status of district plan preparation on-par with the Manual of Integrated District Planning (IDP).

ii. To understand the status of Devolution of Powers to PRIs

iii. To examine the problems in preparation of Integrated District plans.

iv. To identify the issue of data gaps in district planning.

v. To examine the capacity requirements for the stakeholders of district planning with focus on DPC members.

vi. To find the reasons for failures in implementation of district plan.

Methodology and Study Area

This study analysed the planning support provided by the State in terms of policy prescriptions, government orders, guidelines, etc. The study was conducted in nine States, covering the southern, northern, eastern and western parts of the country. From each

region, two States were selected. Accordingly, from southern region Karnataka, Tamil Nadu, from northern region Uttar Pradesh, Punjab, from Eastern zone West Bengal, Jharkhand and from western region Rajasthan, Madhya Pradesh were selected for field study. Kerala also included for the study as a State of overall better performance. At the second stage, one district was selected on random from each State as sample units of the study. Since the study attempted to understand the status of devolution of powers to local bodies, and process and problems of district planning, it covered the members of DPCs representing various categories of people, namely elected representatives at Gram Panchayats (GP), Block Panchayats (BP) and Zilla Panchayats (ZP), nominated/elected to the DPCs including urban local bodies. In addition, it also covered nominated members/special invitees of sectoral representatives among the district departments who have stake in district planning.

Findings

The major findings are presented below.

Roles and Responsibilities of District Planning Committees

- ◊ District Panning Committee (DPC) has fourth-fifth of its members elected from the Zilla Panchayats and Municipalities of respective district in proportion to the ratio of population representing from rural and urban areas. The representation would be all the Members of Legislative Assembly, Parliament (MLAs & MPs), Mayors of municipalities of the constituencies within the jurisdiction of district. In addition, subject experts and representatives/officials of line departments are also included.
- ◊ In the States of Tamil Nadu, UP and West Bengal, one-fifth of the members were 'Nominated Members' representing line departments and subject experts, but in Jharkhand, the DPC has provision of only elected members of ZPs. The sample population has affiliation with 64.3 per cent ZP members, 24.5 per cent from urban local bodies. Only around 2 per cent were Subject experts and Special Invitees.
- ◊ Majority (84.5 per cent) of the respondents of the study reported positively accepting that, the act has given powers and functions to the DPC and it is to be implemented. But in real status only a very few members were accepted on understanding the real sprit of powers and functions of the DPC and its members. Around 60 per cent said that the powers given are not adequate either to the DPC or its members. But, around 40 per cent replied that the existing provisions of powers are adequate but need to be implemented with real sprit.
- ◊ Majority reported that the committee meetings were carried with the list of activities prepared and presented by various departments for the current year or coming years and the same got approved by the DPC without discussions. Even the member taking up issues for detailed discussions would be suppressed by the local MLAs or MPs or district administration.

Process of DPC Meetings

◊ DPC meetings were conducted once in a year and it was acknowledged by 33.8 per cent of the respondents. In the States like Tamil Nadu and West Bengal, all the respondents have confirmed only one meeting. It can be concluded that majority of the study States conduct one or two meetings except Kerala and MP, which are conducting three meetings. The existing practices of invitation to the DPC meetings were found in various forms like display in the public notice board and print media in Karnataka, West Bengal, UP and MP.

◊ The details related to 'provision of allowances' to DPC members for attending DPC meetings exist in all the States but around 24.8 per cent reported that they have not availed the claims. The type of allowance was sitting allowance in Karnataka, MP, Rajasthan, Tamil Nadu, West Bengal, Punjab, UP and Jharkhand. Monthly honorarium is paid in Kerala.

◊ More than 80 per cent of the respondents participate either as silent and or non-participant but put signature on the resolution passed by the district. The category of non-participants casually go around the departments and finally returned for the signatures. It shows that more than 65 per cent of sample respondents were having a negative opinion and reported that the DPCs were inactive. Most of they members from Rajasthan (60.6 per cent) and UP (69.2 per cent) reported that DPCs in their States were inactive. Only the States of Kerala and Karnataka reported presence of 'very active' DPCs. Madhya Pradesh also reported having 'active' DPCs functioning well towards fulfilling the mandatory requirements.

Availability of Data for District Planning

◊ All the respondents of Kerala and 42.5 per cent from Punjab positively responded on availability of sectoral data at the district level. Further, 50 per cent of respondents from Madhya Pradesh and few from Uttar Pradesh responded negatively and pointed out non-availability of data specific for district planning. In remaining States, the members were unaware of the availability of data management system for district planning committee.

Capacity Requirements for DPC members for preparation of District Plan

◊ All the respondents from Jharkhand, Karnataka, Tamil Nadu and West Bengal reported positively to fix minimum educational qualification as eligibility criteria to become members of the DPC. Same views were supported by 56.3 per cent from Kerala and above 70 per cent from MP, Punjab, Rajasthan and 46.2 per cent from UP. In total, only 36.3 per cent agreed on attending training programmes related to district planning. Majority of the members attended only one training which was also orientation on PRIs.

◊ It is understood that only six per cent of respondents were covered under the national level capacity building institutions like NIRDPR. Thirty-six per cent of the respondents,

majorly from Karnataka, Kerala and UP, attended the training programmes at State-level training institutions like SIRDs and other networking institutions. A majority of them (58 per cent) have attended training programmes conducted by district training institutions.

◊ It reflects that there is a need for organising more number of training programmes by NIRDPR and SIRDs either directly or through networking. Most of the respondents from all the States suggested conducting more number of training programmes to build the capacity of the DPCs as requested by 91.4 per cent.

Administrative Support

◊ The importance of having separate office structure is understood immensely by all the States. All the respondents emphasised on the need for creating office infrastructure for the DPC along with administrative support for preparation of district plan.

◊ Out of the nine States, Punjab and Tamil Nadu do not have separate official mechanism to assist the DPC. But in the case of Uttar Pradesh, majority sample respondents agreed for having office premises for the DPC. Karnataka, Kerala, Madhya Pradesh and Rajasthan are having official mechanism to support the district planning process, whereas Jharkhand, UP and West Bengal have given separate offices for DPC without administrative mechanism and manpower. The experiences of the study reflect that the DPCs that were provided with separate office premises along with manpower show good progress in plan preparation.

◊ In the discussions related to earmarking of funds to meet the expenses related to arrangements on plan preparation, around 48 per cent respondents altogether from the study States agreed on having funds to meet the expenses on plan preparation in Karnataka, Kerala, MP, Rajasthan and UP. In certain States, namely Jharkhand, Kerala, Rajasthan and MP, the funds required for plan preparation is routed through the State Planning Board and in Karnataka and UP, the expenditures are meet by the respective Zilla Panchayat.

Problems in DPC

◊ The plan preparation requires massive groundwork like study on problems and potentials of the district, expert group discussion, preparation of draft development report and involving the expert institutions on seeking suggestions for development plans. It also requires financial assistance to meet the travel and honorarium to the members, people representative and institutions.

◊ Regarding availability of mechanism for addressing the problems of the DPC members as well as other stakeholders in the context of preparation of district plans, only Kerala reported on having grievance redress mechanism. In other States, no specific system was created to hear or find solutions for the issues raised by the members of DPCs.

◊ Key issues highlighted by the majority of the DPC members were failure in proper

orientation on preparation of district development of plan, lack of motivation in terms of financial support or non-availability of recognition, lack of adequate experts' involvement in the planning process and lack of base statistical data about the district.

◊ The DPC members feel no freedom to express their views or raise objections in inclusion and exclusion of programmes and schemes in the district plan. In many States, the minister from the district and the one representing State serve either as chairman, ex-officio member or special invitee, which hinders the free participation of other members or suppression of views of opposite party members. In the States, where bureaucrats leading the process of plan preparation, also neglect the views of DPC members.

◊ Almost all the members agreed on the non-inclusion of subject specialist and planning expertise in the DPC hurdle the visualisation for the long-term development of the district, resulting in total dependency on line department's list of activities as components of the plans.

◊ In all the study States, it was found that the power struggle in the context of district plans severely affects the planning process. The views of elected representatives are not recognised by the district administration and similarly, the views of officials are criticised extremely by the elected members.

◊ The fund crunch is leading to less interest among the DPC members; the DPCs in all States, except Jharkhand, find financial problems in undertaking various projects under district plans.

◊ Majority of the members were of the view that preparation of holistic development plan was not possible due to lack of funding sources for important activities to bridge the development gaps. In reality, funds of various sources both from Central and State governments are directly sent to the Gram Panchayats without much fund allocation to Block and District Panchayats. In addition, departmental development schemes are sent to the departments concerned without any link to the DPCs concerned. This non-coordinated effort shows lack of convergence development.

◊ The exercise of mere preparation of district plans compelled to put a district plan as a shelved document without getting implemented. It severely affects the enthusiasm of the DPC members coming forward in district planning process. It is understood that in Jharkhand, rural development funds are routed through DPC, which motivates DPC members and gives momentum for the district planning process.

◊ The district planning process ends with just consolidation of plans submitted by various Block Panchayats and urban local bodies. In the process of consolidation, representatives of block and Gram Panchayats are not involved in majority of the States, which is essential to debate inclusion and exclusion of their proposal. There is always a tussle in amalgamation of plans of urban local bodies with local needs, proper integration needs, adequate capabilities and appropriate mechanism for integrated district plan.

◊ Around 77 per cent of respondents positively responded on the existence of political conflicts, except Kerala and Madhya Pradesh, and Rajasthan to a certain extent. Lack of coordination among political parties and the contemplation over holistic development have resulted in delay of plan preparation and acceptance of plans by different departments to get administrative approval from their respective heads.

◊ It is seen that political rivalry is obstructing the planning process for non-inclusion of demands from the political opposition and vice-versa; the ruling party insists drafting of development proposals based on their own ideas, regions and interest. In Kerala, matured political discussions and mutual agreement lead to healthy discussions by ruling and opposition parties for the cause of unified development for their district.

◊ In Kerala, around 80 per cent of the study population expressed that DPC is the ultimate authority on consolidation of plans. Here, different line department heads or representatives present annual action plans of their departments followed by detailed discussion on the necessity of inclusion and exclusion. Karnataka also has a strong DPC system and all the elected members of ZP become members of DPC. Therefore, in Karnataka, the supreme power of consolidation and approval of district plans are in the hands of Zilla Panchayat joined by urban local bodies. In some States, namely Punjab, MP, Rajasthan, Tamil Nadu, UP and West Bengal, the district administration plays dominant role in preparation and approval of district plans.

◊ Majority of the respondents agreed on that up to 50 per cent of the activities get possibility for action as reported from Jharkhand (100 per cent), MP (23 per cent), Punjab (52.5 per cent), West Bengal (100 per cent) and Rajasthan (24.2 per cent). Acceptance for 50-75 per cent was reported by all the members of DPC in Karnataka, 63.3 per cent in Rajasthan, 47.5 per cent in Punjab, and 34.6 per cent in MP. In Kerala and Karnataka, majority of the respondents (65.6 per cent) stated that more than 75 per cent of planned activities were getting implemented.

Suggestions for improving the functional ability of the DPCs

◊ The State's specific PR Acts have given delegated powers to prepare and review the implementation of district plans as well as play an advisory role in making corrective measures to the department concerned on finding shortcomings, misappropriations and deviations. But in reality, majority of the members did not realise their roles and powers due to less exposure to the constitutional provisions. It needs adequate orientation, realisation and creating enabling environment on implementation of assigned roles.

◊ The State of Kerala is fully positive in decentralisation of powers and functions and activating of various institutions of local governance, including DPC which has resulted in majority of respondents rating DPC as 'VERY STRONG'. SATISFACTORY status was reported by the respondents in Karnataka, West Bengal, MP and Rajasthan, whereas the respondents from Jharkhand and Tamil Nadu, UP and Punjab revealed that the DPCs have not been performing as per the provisions of the State Acts.

Conclusions

The concept of holistic development aims to bring comprehensive development of the region or district by inclusion of various sectors, sections and regions addressing the gaps in development process with prime focus on identifying the drivers of development through lead sector. The sectoral development includes all major sectors like agriculture and allied production and services. The inclusion of various sections includes addressing the issues of different income categories of population. Similarly, inclusion of all regions with priority to backward and most backward regions for addressing various geographical problems and needs is essential. Further, the development of the district has to be aimed at developing services and infrastructure, which enable people to get ample opportunities for various livelihood options. This nature of inclusion was evident in bringing development in various study States. The research further found that mere preparation of a document of plan would not bring any change in development of the districts, until more attention is paid on identifying major issues and needs of the district development. Therefore, a mechanism is required to cross-verify the proposed projects and activities under the district development plans with the actual problems and needs in the context of overall development of the district.

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INSTITUTIONAL INNOVATIONS IN RESPONSE TO AGRARIAN MARKET CONSTRAINTS: A COLLECTIVE CASE STUDY

Dr. Surjit Vikraman
Dr. R. Murugesan

Introduction

Agriculture in India supports livelihoods of more than 60 per cent of the population. Hence, any transformation in the rural economy has to focus on strategies and interventions in the agriculture sector. Despite significant gains on production and productivity front, agriculture sector suffers from several constraints, primarily due to factor and product market distortions. These market imperfections and absence of appropriate policy mechanisms to address these constraints result in low levels of returns to cultivators and landless agricultural labourers. Several policies and programmes aimed at addressing the constraints posed by these imperfections in various agrarian markets (input and output market constraints) define the characteristics of agricultural production systems and impact the welfare of farming community. This has resulted in several institutional innovations at different parts of the country that have tried to address various market imperfections. These institutional arrangements had its beginning in the form of cooperatives, and later took the form of SHGs, Group Farming Committees, Farmers Interest Groups/Clubs and several forms of farmer's organisations to address the constraints in availability and access to factors of production.

Given the socio-economic situation and the changing policy environments, to improve the livelihoods of small holder farmer producers, they should be supported with an institutional arrangement which can a) create scale economies through horizontal coordination, aggregation and marketing of output and purchase of inputs, b) improved bargaining position, c) technical support in production, identifying and prioritising buyers, prices, quantity and quality of commodities traded, d) reducing transaction costs in seeking information and organising production and marketing, and e) handle uncertainties and cushion risk in production and marketing.

In this context, we have undertaken a detailed study of two institutional innovations that has been formed in response to constraints (input and output market constraints) in the agrarian markets in the State of Kerala. The first institutional innovation is the formation of 'Green Army' which is an institutional arrangement to perform the agricultural production practices in an irrigated rice production system in Wadakkanchery Block of Thrissur district in Kerala. It also serves as an institution to protect the welfare, and ensure a decent standard of living through creation of employment opportunities for agricultural labourers in the region, who are the most vulnerable sections of the society. The second institutional innovation is a farmer's group, which has organised themselves into a Farmer Producer Organisation to sustain agricultural production and protect the livelihoods of household dependent on them. The Mayyil Farmer Producer Company in Mayyil Panchayat of Kannur

district of Kerala has adopted a unique strategy of collectivisation of the agricultural operations to reap the benefits of performing operations collectively in scale, at the same time decentralising or disaggregating the output market activities. The study was undertaken with the following objectives.

Objectives

a. To study and document the process of formation of such institutions and the social, and economic factors that has facilitated this process by adopting Institutional Analysis and Development framework.

b. To study the structure and composition of the new institutions that has emerged to address the agrarian market constraints (both factor and product markets).

c. To analyse the sustainability of such institutions, and the social contributions in terms of creation of public goods and services for stakeholders.

d. To understand the constraints and challenges faced by these institutions in addressing the agrarian market imperfections and potential ways of overcoming these.

Methodology

This is a detailed study of two institutional innovations as a result of agrarian market constraints. Specifically, we are studying two institutional innovations that have emerged out of input and output market constraints. As the core focus of the study is on the nature, structure and process of formation of innovative institutions to address various market constraints, understanding the institutions in depth is very critical. We have adopted the Institutional Analysis Development (IAD) framework developed by Ostrom (1993) in studying various dimensions of these institutions. Within IAD, we have used the methods of analysis of secondary data and various sources of information, personal interviews, case studies, focus group discussions, PRAs and value chain analysis to understand the process of institution formation, its structure and interactions with various components in the framework. The qualitative and quantitative data and information on institutions gathered through consultations with stakeholders of the selected institutions, interviews with key informants and PRAs.

Study Area:

Wadakkanchery, Thrissur District, Kerala and Mayyil, Kannur District, Kerala

Findings:

Major Learnings from Green Army

Formation of Green Army is a significant intervention to create an institution to address the challenges in agriculture development. It was formed in the Wadakkanchery Block Panchayat of Thrissur district in Kerala, when the area was facing decline in agriculture

production and reduction in the area of cultivation. It resulted in farmers shifting away from cultivation. They identified that increased cost of cultivation is the major reason for loss in agriculture which is primarily driven by the higher cost of labour. Following traditional way of agriculture practices and lack of adoption of modern machineries and technologies are the other reason for raising the cost of cultivation. The labourers were also facing lot of problems, including the uncertainty in the fixed working days, and lack of social security and other benefits. The stakeholders of the agriculture sector intervened in this issue by formalising and institutionalisation of the labour sector. The output was the formation of Green Army.

Green Army transformed the entire status of labourers, and thereby agriculture sector in the Wadakkanchery Block Panchayat. They organised the scattered labourers and trained them in skill enhancement and capacity building to make a skilled labourforce. They also entitled various social security measurements, fixed working days and fixed salary, which empowered the labourers. It also brought mechanisation to the fields of Wadakkanchery, which was following traditional agricultural practices. This resulted in the reduction in cost of production and organised farming system in the area that attracted the farmers towards the Green Army and cultivation of paddy. Green Army grew into a system that provides all agricultural activities on contract basis at a specified charge for each work. It reduced the risk of farmers engaged in paddy cultivation. Green Army helped to strengthen the *padashekharasamiti* and also provide banking support to get various loan and financial facilities, and thus contributed to creation of sustainable livelihood options in agriculture sector.

Major Learnings from Mayyil Rice Producing Company

a) The institutionalisation of paddy cultivation in Mayyil by MRPC helped to create sustainable paddy cultivation by a centralised production and decentralised marketing in the area. MRPC ensured a fair price for the farmers and extra income through value addition which promoted more farmers towards cultivation and make it as a persistent livelihood option. It also could transform agriculture sector from a mere livelihood into a successful enterprise.

b) The formation of MRPC improved the status of farmers by generating better income and profit from paddy cultivation. Increase in fallow land cultivation and higher profit from agriculture helped to increase the employment opportunities for the farmers. The existing price for paddy in MRPC is Rs.23 and Rs.50 for one kilogram of rice. The farmers could increase income by value addition contributing to sustainability of paddy cultivation.

c) Transformation of loss-making agrarian sector to profitable enterprises in Kerala is the key contribution of MRPC. Introduction of mini rice mills to the household encouraged this movement. It also emphasised the role of mini mills in India in which majority farmers have small or marginal holdings.

d) The success of MRPC was also a success of convergence of different PRIs, agriculture departments and other stakeholders for the agriculture development of Mayyil. It is a model for extension of agriculture activities and maximising the potential by bringing that institution into one platform.

e) MRPC has a significant role in the empowerment of farmers, women, children, senior citizens and other marginalised groups in the area by total farming movement. It strengthened the agriculture sector as a major livelihood option with more profit to the farmers. MRPC also reduced the risk of farming by mechanisation. Introduction of mini rice mills and local milling empowered the women to earn income within household along with all other activities. Women can take care of the children, person with disabilities and old age people in the household along with milling.

f) The agrarian technologies were not accessible to the small and marginal farmers who were cultivating individually. MRPC made an intervention here by converging various PRIs and agriculture department, thereby providing them access to new agricultural technologies and bringing machineries, including mini rice mill into Mayyil, at an affordable rate. Various agencies, including KVK and Agriculture University, brought the new technologies to the fields and it made a positive impact on the agriculture sector in Mayyil. It has also pooled the machineries from various sources, which otherwise was unaffordable to individual farmers.

g) Mini mills have an important role in the success of Mayyil model to make a decentralised value addition and marking network. This is effective for the farmers in Kerala where most of the farmers have small and marginal land holding as an output of land reform in Kerala. This situation is almost same in India which has more number of small and marginal farmers. It has a greatest scope to machineries for pre and post agriculture activities by introducing such machineries as mini rice mill, mini oil mill and mini flour mill.

h) Agriculture sector has greater potential in various ways, such as generating more employment, income and profit, ensuring food security, nutrition security and sustaining the ecological balance in the area. MRPC can achieve more targets by bringing in more professionalism into its activities and extending its operations by centralising the production and decentralised marketing with the effective participation of farmers and other stakeholders.

Conclusion

These two institutional innovations have tried to address the major agrarian market constraints that pull back the performance of the sector and have contributed to the lives and livelihoods of population dependent on them. The most important factor that has contributed to the emergence of these institutions is the leadership and intervention of the Panchayati Raj Institutions (PRIs), which are the institutions for local self-governance. The PRIs of the respective regions facilitated and supported the formation of these two institutions and ensured a smooth sail towards their establishment to address the agrarian

constraints. They played a major role in creating a platform that ensured collaboration of various research institutions, agricultural development agencies, communities, and financial institutions in the region to work towards finding a solution to the problems. A detailed social and economic assessment was carried out about the possible ways of addressing these constraints and they came up with a strategy, which was suitable for the region as well as ensured support and participation from the community. This facilitated the convergence of institutions engaged in research, technology transfer, natural resource management, agriculture and rural development programmes, financial inclusion, and local governance and paved way for the establishment of a sustainable agricultural production system.

The formation of the two institutions studied has made significant contribution towards:

a) Bringing convergence of institutions of local self-governance, agriculture research, technology transfer, financial access and inclusion, natural resource management and rural development.

b) Improving the skill levels and performance of agricultural labourers, provision of dignity of labour, financial inclusion and social security support that has significantly improved their standard of living.

c) Adopting measures that are gender sensitive and resulted in gender empowerment.

d) Ecologically sustainable strategies for natural resource management through convergence of various agriculture and rural development institutions.

e) Inclusive and sustainable development of farming community through locally adaptable interventions.

The study of two institutional innovations that have tried to address the agrarian market constraints have shown the importance of decentralised planning and role of institutions of local governance (PRIs) in finding solutions to micro level issues that constraints sustainable development, thus contributing to macro level benefits. These are small steps towards finding local solutions to global problems that constraints sustainable development.

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TRANSFORMING INDIA THROUGH STRENGTHENING PANCHAYATI RAJ INSTITUTIONS BY CONTINUOUS TRAINING AND E-ENABLEMENT

Dr. Pratyusna Patnaik
Dr. C. Kathiresan

Introduction

The nation's experience with local governments across the country for more than two decades of Panchayati Raj Institutions (PRIs) functioning has definitely proved that it is one of the best available service delivery systems more so for basic services. But over the period of time, the roles and responsibilities of the Panchayat functionaries have increased because of new schemes, programmes and legislations. Accommodating capacity development of the Panchayat functionaries with these new initiatives is very significant for enabling them to handle the issues pertaining to the development of the Panchayats. Approximately, three million functionaries assist the elected representatives to manage the PRIs. Their presence on the scene will be for just five-years, and likely a new set of elected representatives will be on the stage after every five years. This trend creates constraints for touching them with capacity building effort by various organisations and enabling them with continued learning, which at the same time is a great strength as it is an essential element of democratic governance. Hence, there is a dire need to rework the capacity development issues of both ERs and functionaries, which can address the core and chronic problems. To lend dynamism to the national efforts of 'Transforming India', the NIRDPR in association with the Ministry of Panchayati Raj (MoPR), has launched a significant project titled 'Transforming India through Strengthening PRIs by Continuous Training and E-enablement.'

Objectives

The objectives of the projects are as follows:

- Standardisation of learning material with locally relevant content and adoption of regional diversities
- Certification of trainers/resource persons
- Enrolment/enabling new resource persons through online certificate programme
- Launching of Certificate/PG Diploma/Master's programme for elected representatives, functionaries, and others interested in management of PRIs
- Promoting documentation of success stories through online 'Rural Connect'
- E-enablement of Panchayat functioning

Methodology

Training online/Offline

Study Areas

Nationwide Project

Findings

- Under this project the existing trainers were oriented, tested and certified to act as Master Resource Persons (MRPs) in PRI training programmes. As on February 2021, a total number of 6,451 trainers have been assessed in 29 States & UTs in 164 batches. Out of this, 4,722 members who scored A&B grades, were certified as Master Resource Persons (MRPs) under specific subject/specialisation/thematic areas.
- Also developed were e-Resources/e-Modules for online certificate programmes (43 expert lectures, 72 e-Books, 2D and 3D animation modules on 24 topics, 115 video snippets including bytes from successful Sarpanches, 12 interactive Learning Modules and 6 documentary videos).
- University of Hyderabad (Central University) has approved a six-month certificate course on 'Panchayat Governance & Rural Development' to be offered online through Gram Swaraj portal. It is a paid course with course credits as approved by UGC. It is planned to launch this course from June 2020.
- NIRDPR under TISPRI project has documented 32 case studies (including video documentation). These case studies are used in regular training programmes and also shared with SIRDPRs. All the documented case studies are made available on NIRDPR website.

Conclusion

In order to empower the Panchayats as institutions of local self-government, MoPR's flagship scheme, Rashtriya Gram Swaraj Abhiyan (RGSA) lays special emphasis on the capacity building and training of elected representatives and officials of PRIs. The RGSA extended financial support to NIRDPR through TISPRI project (2017-2020), under seven key components/activities, for improving the overall functioning of PRIs. NIRDPR successfully implemented the project and completed the activities supporting the overall objectives of RGSA. Standardising learning materials for PRIs, sector-wise/theme-wise certification of 4000+ Master Resource Persons (MRPs) who can be engaged by State governments for their training programmes, launching online certificate courses for continuous training programmes and distance mode programme on Panchayat governance, documentation of success stories, supporting MoPR in e-enablement of Panchayats and People's Plan Campaign are considered to be the key achievements during the first phase (2017-20) of TISPRI project.

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CAPACITY BUILDING AND TRAINING OF ELECTED WOMEN REPRESENTATIVES IN PANCHAYATI RAJ INSTITUTIONS OF JHARKHAND

Dr. Pratyusna Patnaik

Introduction

In order to accelerate the active participation of EWRs in the administrative and governance functions of PRIs to ensure the bottom-up planning process, capacity building and training (CB&T) plays a key role. The CB & training will equip the EWRs to actively participate in development planning with their own unique understanding of the needs and aspirations of people. In order to disseminate the knowledge to the EWRs on the PRIs system the National Institute of Rural Development and Panchayati Raj, Hyderabad in collaboration with the National Commission for Women, GoI endeavours to undertake massive capacity building programme for more than 3400 elected women representatives of PRIs in Jharkhand in a phased manner.

Objectives

- To increase the capacity of all the EWRs by providing training, so as to enable them to deliver in an efficient and effective manner in functioning as public representatives in the Panchayati Raj system.
- To assess the knowledge levels and capacities of trained EWRs whether they perform their roles effectively and efficiently.

Methodology

The study is descriptive and analytical in nature where data has been collected in accordance with the requirement. Different tools and techniques were applied to analyse the knowledge levels and the impact of training programmes in governance improvement in Panchayats. A checklist was used to conduct interviews with trained and non-trained elected women representatives of PRIs, besides holding focus group discussions and interactions with other stakeholders. A sample of 480 EWRs was drawn for the study from the three selected districts of Jharkhand through stratified random sampling.

Study Areas

The study covered three districts of Jharkhand, namely Simdega, Pakur, Chhatra. In total, 47 Panchayats from 27 blocks of these three districts were selected for the study.

Findings

- The programme covered 2064 EWRs and successfully completed the training

programme, which has helped the Panchayat representatives to function effectively. The impact assessment study reveals that 47.7 per cent trained EWRs, who attended CB & Training were able to review the developmental schemes initiated, which is comparatively higher than non-trained EWRs (29 per cent). Most of the research findings show that due to the gap of knowledge of elected representatives, the Panchayat officials show indifferent attitudes towards them. Interestingly, trained EWRs (51.9 per cent) said that the relationship with the officials of the various line departments has highly improved after the training when compared to the non-trained EWRs.

- Further, there was always an assumption that the participation of the villagers at the Gram Sabha was low due to lack of knowledge and information. Therefore, the CB& Training focussed on the importance of mobilise people to attend the Gram Sabha. It was found that 54.6 per cent of the trained EWRs could achieve the feat whereas only 13.8 percent of the non-trained EWRs could mobilise people to attend the Gram Sabha.
- In order to assess their knowledge about GPDP, all criteria such as participation in the planning process, community mobilisation, data collection, situation analyses, resource mobilisation and visioning exercise were considered. It was found that 56.5 per cent of the trained EWRs participated in the planning process while only 18.5 per cent non-trained EWRs participated. Further, 54.4 per cent of the trained EWRs were involved in community mobilisation, against 10. 8 per cent non-trained EWRs.

Conclusion

The training programme primarily focused on strengthening the capacities of elected women representatives to perform their duties and responsibilities towards the local governance in a better way. As elected representatives of Gram Panchayat, EWRs are responsible for ensuring the development and protecting the rights of villagers. The EWRs largely agreed that the capacity building and training programme ignited their mind towards working for the all-inclusive development. The training programmes boosted their morality and shaped the framework for better development. Majority of them lauded that the training programme not only enhanced their knowledge and skill but also shaped their attitude as an elected representative with constitutional obligation.

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AN ENQUIRY INTO THE PRACTICE OF MANUAL SCAVENGING IN RURAL INDIA (CASE STUDIES IN RURAL KARNATAKA, MAHARASHTRA & UTTAR PRADESH)

Dr. R. Ramesh
Prof. P. SivaRam

Introduction

The Employment of Manual Scavenging and Construction of Dry Latrines (Prohibition) Act, 1993 prohibits the engagement of persons for manually carrying human excreta, and further prohibits the construction or maintenance of dry latrines. The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 provides for the prohibition of employment as manual scavengers, rehabilitation of manual scavengers and their families. Yet, this practice continues in many urban areas and also in some rural pockets. The Government of India has initiated various steps since Independence to liberate the scavengers from manual cleaning of night soil and rehabilitate them in alternative dignified occupations. The practice of manual scavenging does not augur well for a country aspiring to become clean with its Swachh Bharat Mission. Hence, this study was undertaken.

Objectives

i. Identify and report the prevalence of the practice of manual scavenging in rural areas

ii. Find out the number of insanitary/dry toilets that have been converted into sanitary toilets, and if it has helped in the reduction of manual scavenging practice in rural areas

iii. Examine the causes for the prevalence of manual scavenging, and the factors that uphold or back up; and those that work to abandon and cast off this practice.

Methodology

Case study design was used taking into consideration the sensitive nature of the issue under study, and case study with only mental check-lists were used for data collection. Qualitative enquiry techniques were used for data collection. Quantitative secondary data available in the SECC-2011 and the database of the Ministry of Social Justice and Empowerment has been used to find out the number of manual scavengers in each of the study States, with a temporal dimension to the issue. The manual scavengers, rehabilitated manual scavengers, and officers in charge of implementing social justice related programmes at the district and block levels were the sources of data.

Study Area

The study covered three States, viz. Uttar Pradesh, Maharashtra and Karnataka, where

the prevalence of manual scavengers was reported very high. Eighty case studies covering 16 GPs have been undertaken. The researcher has conducted personal interview with 80 persons from the list of manual scavengers obtained from the Ministry of Social Justice and Empowerment.

Findings

- The researcher set out doing field work with a list of 80 manual scavengers provided by the respective district authorities in the three selected States, viz. Karnataka, Maharashtra and Uttar Pradesh. The empirical verification revealed that the people in the list had to be put into three categories: (1) People engaged in Manual Scavenging for a living, and considered to be so in the government records; (2) Manual scavengers but got omitted during surveys; (3) Not actually manual scavengers, but their name is found in the government records as manual scavengers. The last category is a category wrongly identified as manual scavengers. It means that they are identified by government officials and NGOs as manual scavengers, perhaps, because they belong to a given community or they reside in the area close to where manual scavengers live.

S. No.	States	Manual Scavengers	Exclusion error	Inclusion error
		(1)	**(2)**	**(3)**
1	Karnataka	25	8	0
2.	Maharashtra	4	0	19
3.	Uttar Pradesh	24	0	0
Total		**53**	**8**	**19**

- In the study area (selected Gram Panchayats), the researcher met 80 households. They belong to all the three classifications shown in the table given above, i.e., (1) People engaged in Manual Scavenging for a living; (2) Exclusion Error: meaning they are manual scavengers but got omitted during surveys; (3) Inclusion Error: meaning they are not actually manual scavengers, but their name is found in the list of manual scavengers with the District Administration. Among the 80 respondents interviewed, 53 were either currently practising/retired from manual scavenging related works. In addition to this, eight others who practice manual scavenging have been excluded in the surveys. In the third category, there are 19 respondents, who have given up manual scavenging long ago, or they were never involved in manual scavenging but wrongly identified by NGOs or in government surveys. They are doing business, daily wage workers, rearing animals and share-cropping and so on.
- The researcher wants to clarify an important point here. In the table above, 'people engaged in manual scavenging' means those involved in unclean occupations such as cleaning open drainages, pour-flush institutional latrines, septic tank clearing, carrying and disposing carcass of dead animals, etc. It does not necessarily mean cleaning, carrying and disposing human excreta from dry latrines/insanitary latrines.

- The first step in taking up any rehabilitation measures for manual scavengers is 'definition and identification'. There is a lot of data discrepancy/inconsistency among various datasets on manual scavengers provided by Census 2011, SECC-2011, and the data provided by various departments such as the Ministry of Social Justice and Empowerment, and the Ministry of Urban Development, etc. This inconsistency in definition and discrepancy in datasets makes identification very difficult. However, the Ministry of Social Justice and Empowerment has started a fresh re-survey, which is going on. This must come out as a reliable dataset. People involved in manual scavenging are gradually turning to other occupations as well. Therefore, any such dataset (more importantly) must be dynamic. Unless such changes are updated, our datasets tend to show anybody belonging to a given community is a manual scavenger, which is not true.
- In the datasets of Census-2011 and SECC-2011, it seems anybody belonging to a given sub-sect within SC had been construed as manual scavengers, so much so that any poor family living in the area where manual scavengers lived also seemed to have been included as manual scavenger. Thus, there have been a lot of identification errors in the survey, which has resulted in some getting missed out, and others who are actually not manual scavengers being recorded as manual scavengers without even the person or family being identified as manual scavenger not knowing about it. The data enumerators of these surveys do not seem to have followed any survey protocol. For instance, a standard 'definition' has not been used. Enumerators seemed to have used their own definitions, when it comes to identifying who a manual scavenger is.
- In the current study conducted in three States (Karnataka, Maharashtra and UP), out of a list of 80 manual scavengers obtained from these State authorities, it was found during empirical verification that only 39 of them were actually manual scavengers. In Karnataka, eight of them were unidentified. Out of the 23 respondents interviewed in Maharashtra, it was found only 4 of them were engaged as manual scavengers, and the remaining 19 of them were found to be engaged in several different occupations, and not as manual scavengers.
- Here again, those reported as 'being engaged in manual scavenging' must be understood from a restricted definition of being involved in 'unclean occupations', such as cleaning up open drains, or engaged in cleaning up toilets in schools, clinics, Panchayat Buildings and other government offices such as a VAO Office, etc., and not cleaning, and disposing human excreta from insanitary/dry latrines. They have moved into other occupations such as farmers, wage earners in agriculture, sharecropper, tenant-farmers, petty shop owners, privately employed persons and so on, which manual scavenger surveys have not taken into account. Their primary source of income comes from other multiple livelihood options, where manual scavenging does not figure in.
- The SECC-2011 identified 1,82,505 manual scavengers in India. As per the recent (30th March 2020) Manual Scavengers Survey, there are only 10,224 manual scavengers in rural India. They are in Uttar Pradesh (9,784), Karnataka (435) and Punjab (5). No

other State has manual scavengers (in rural areas) as per the government reports. This data is based on self-declaration by manual scavengers, which is followed by a two-layer official check, which means first verified by enumerators appointed, and then confirmed by one more verification by supervisors.

- Presence of dry toilets was extensively considered as a reason for the practice of manual scavenging to continue in Indian society. The Swachh Bharat Mission-G Baseline Survey-2014 found 2,73,909 insanitary latrines/dry latrines in the country, and converted 2,66,384 of them as sanitary latrines as of January 2019. It further reported that by 2nd October 2019, the remaining 7,525 dry latrines would also be converted into sanitary latrines. It could be recorded that the SBM-G has converted most of the insanitary latrines into sanitary latrines in the country, which has relieved most the manual scavengers from the sub-human existence. There are no more dry latrines in the study States.
- Conversion of dry toilets into water seal flush toilet has accelerated the pace of manual scavengers quitting their traditional occupation, and look for other jobs. However, they have not moved far away from what they have been exposed to for a living for over 30–40 years. They are involved in (or continue to do) other similar unclean occupations such as cleaning of open drainages, emptying toilet septic tanks, carrying and disposing slaughter house wastes, cleaning public toilets, street sweeping, domestic solid waste collection and disposal, etc.
- Although their parents want the younger lot to study and give up the parental occupation, many youngsters do not move beyond secondary and higher secondary level education. Only three could be found going for college level education in the 16 Gram Panchayats visited.
- In most of the study villages, many manual scavengers reported to have received One Time Cash Assistance (OTCA) of Rs.40,000 under NSKFDC (National Safai Karamcharis Finance & Development Corporation). But they continue to be involved in all sorts of unclean occupations. For instance, in Kolar district of Karnataka, manual scavengers have received finance assessment (Rs. 40,000 under OTCA). Yet, they continue to do manual scavenging works because (i) the OTCA reportedly is insufficient to start any small business; (ii) the income from septic tank cleaning is attractive to them for there is no competition, they can drive a hard bargain. They want permanent livelihoods and so are looking forward to the State governments (NSKFDC) to assist them.
- With regard to the skill training imparted, there were many small businesses suggested to them during training programmes e.g., small eatery, tea stall, beautician, vegetable stall, papad making and selling, pickle making, etc. However, they cannot start any business because of the prevailing social alienation that manual scavengers' families is experiencing. The training imparted through government programmes for rehabilitation of manual scavengers must take such things into account. A few manual scavengers still have not received any kind of assistance for their rehabilitation, and so they are still involved in manual scavenging works.

Conclusion

Manual scavenging in rural areas of India that got defined as a practice involving cleaning, carrying and disposing human excreta from dry/insanitary latrines is almost over and done with. The acceleration provided by SBM-G by converting insanitary latrines into sanitary latrines can be attributed as one of the important factors, besides other factors such as almost no new entrants into this occupation. However, other forms of unclean occupations in rural areas such as cleaning open drainages, cleaning septic tanks without adequate equipment, precautions, and protective gearings go on unabated.

Fifty-years-olds are involved in cleaning, carrying, and disposing human excreta from dry latrines are gradually retiring on the one side, while the number of dry latrines that necessitated regular manual scavenging has come down in the past five years, on the other side. The chance of the younger generation from such communities getting into manual scavenging is very rare. Those who have stepped in are into running septic tank trucks, cleaning up institutional latrines, or working in pay and use toilets. Although their parents want the younger lot to study and give up the parental occupation, many youngsters do not move beyond secondary and higher secondary levels.

Their shifting from manual scavenging is slow and gradual. The SBM-G has really accelerated this transformation to take place much earlier than what otherwise it would have been in the normal process of social change. However, there is no rapid shift in getting out of these unclean occupations. Since those belonging to other communities do not consider this as an occupational choice at all, the youngsters from manual scavenging families easily get into this, but using modern equipment and motorised trucks.

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DIGITAL MEDIA FOR RURAL DEVELOPMENT: A COMMUNICATION STUDY IN REMOTE RURAL TELANGANA

Dr. Akanksha Shukla

Intorduction

The idea of digitally-oriented development is as powerful as the technology. No single technological revolution has changed the lives of current generations in the way that the Internet has. As we sit on the threshold of emerging technologies summarised by Ms. Aruna Sundararajan, Secretary, Department of Telecommunications, in the Annual Report of the COAI 2018-19, *that with 5G, IoT, AI, M2M, ease of doing business, sharing of spectrum, trading and harmonisation, India has become the highest data consuming nation of the world with consumption at 1.3 Billion GB per month.* The optic fibre network, which has been laid for 14 lakh km in 2018, has connected over one lakh Panchayats (COAI Report, 2018). The ambition is to provide 10 Gbps in all Gram Panchayats, 10 million public Wi-Fi hotspots and 4 million jobs in the telecom sector. The report further details that there is 54 per cent increase in the number of 4G smartphone devices in India. Mobile broadband penetration is recorded at 47 per cent of the population.

The Telecomm Report 2018-19 concludes that the sector has witnessed exponential growth over the last few years which was due to many factors such as affordable tariffs, wider service availability, roll out of new facilities and services such as Mobile Number Portability (MNP), 3G and 4G, evolving consumption patterns of subscribers, and conducive regulatory environment. As per the TRAI subscription report 2019, there are 527 million rural subscribers in India as on Feb 2019. Total wireless subscribers 1,165.46 million (Urban subscribers 657.27 million, Rural subscribers 508.19 million). The internet subscriber base in the country is 665.31 million out of which rural internet subscribers are 238.26 million. This means that out of 100 population, internet subscription in rural areas is 26.57 as against the urban populace of 101.63. The report also elaborates that fixed line subscription is declining while wireless subscriptions are increasing. Along with this, there is a clear trend of decline in Village Public Telephones (VPTs). Finally, there is a clear trend indicating increased usage in internet data in rural areas.

Many earlier studies highlighted that there is a strong connection between ICT service and growth or development in any nation, especially in the context of developing countries. A programme entitled 'Digital India' was initiated in India after the inceptions of two prominent programmes christened 'Make in India' and 'Clean India'. Digital India programme has penetrated maximum into all governmental departments. This Digital India programme embraces three visions to be achieved, such as 1) Digital Infrastructure as a Utility to Every Citizen, 2) Governance & Services on Demand, and 3) Digital Empowerment of Citizen. Under the Digital India initiative, many additional and minor programmes have been initiated by the Central and State governments. A few programmes include 'Digi-Dhan Mission' initiated by the government to achieve a target of 25 billion digital transactions,

which have been outlined in the Union Budget for the fiscal year. UMANG app was launched by Prime Minister at the GCCS with aim of bringing over 162 government services online to make people beneficiaries of such services and also ensure all such service to be delivered promptly and transparently. As per the guidelines of Digital India programme, at least a person in each household shall become e-literate.

Telangana government also adopted Digital India programme to deliver efficient and timely service, and has decided to attain these digital goals of the Central government under this programme. On 1st July, this programme was officially launched on one-time, in many places to promote online-payment, greenPHABLET for agriculturists, promoting digital literacy, cyber hygiene and cyber-security, biometric attendance system, and Wi-Fi. Its digital programmes have been segregated into two categories, such as 1) supply-side and 2) demand-side. Supply-side includes 1) laying OFC to each household using water-grid trenches, 2) providing 4G service throughout the State, 3) install Wi-Fi facility in major cities and towns, and 4) e-Panchayat Scheme programme under which One Stop Shop (OSS) kiosk shall be installed in each Panchayat. On the demand-side, there are programmes including 1) digital literacy programme under which one member of each household shall be taught to become digital literate, 2) school computer literacy programme, under which basic computer education shall be taught to students from class 6th onwards, 3) expansion of MeeSeva service, 4) conversion of as many MeeSeva services as possible into mobile apps or on the mobile platform, and making mobile governance a reality in Digital Telangana, and 5) identifying technology solutions for all government agencies to offer better service to the citizens.

Objectives

The study objectives are as follows:

1. To map out mobile access and use, at micro level, in select villages of Telangana.
2. To access the areas in which Internet connectivity has been most useful and to what extent and suggest methods and means as to how internet can be optimally utilised for rural development. The parameters to assess can be at the individual level and stratified group level within the community.
3. To ascertain the role of government (State/Central), Panchayats, NGOs and Local Administration in monitoring the use of digital/media in the villages.
4. To understand levels of mobile literacy in both genders and identify gaps therein.

Methodology

The study was exploratory and experimental in nature. It was envisaged that case study method along with ethnographic observations will reveal the attitude for the utilisation of digital media. To create possibilities of e-interventions such that there is desire to have social and behavioural change through communication. It is envisaged to show an audio/ visual clip of the identified six areas mentioned above. This study adopted both qualitative

and quantitative methods to investigate into research phenomenon, and would also generalise empirical findings across the nation. The data was segregated into secondary and primary data. As part of procuring secondary data, Internet was considered a prime source of literature accumulation. It also depended on non-e-resources involving books, journals, and documents of the government. For the procurement of data, we approached Mandal office located in Rajendranagar and State Government Department of Information Technology, Electronics & Communications in Telangana. Though we failed to obtain accurate information from officials and departments concerned, we had been directed to other sources known as Non-Government Organisations. In addition, relevant information has also been procured from NGOs working on 'Digital India' programme. One of the prominent NGOs engaging with Digital India programme is Telangana Information Technology Association (TITA), which aims at delivering teaching on digital literacy and cashless transactions to people.

Study Area

The study covered four villages in two districts of Telangana State, i.e., Adilabad and Nalgonda. Selection of these two districts aided in understanding how geographical difference determines awareness of digital literacy and mobile usage. Four villages that are co-equal between these two districts were selected based on three significant criteria including 1) Digital awareness and adoption level, 2) Mission Antyodaya Ranking, and 3) Availability of IT Infrastructure and Connectivity. These four villages are unequal to each other in terms of different geographical location and social compositions of people, etc. Regarding geographical difference, Adilabad district, as aforementioned, is located quite far away from Hyderabad, while people in Nalgonda district have more exposure to different schemes and policies as it is close to Hyderabad city. In Adilabad district, two villages are selected, namely Mukhra and Khandaw villages which ranked better performance village and worst performance village, respectively, by ranking order of Antyodaya.

Details of the villages and sample HHs covered under the study

District	Mandal	Village	Household	Sampled HH
Adilabad	Ichoda	Mukhra (k)	304	152
	Narnoor	Khandala	222	144
Nalgonda	Kangal	Telakantigudem	350	184
		Darveshpuram	393	196

For the selection of respondents in each village, a sample calculator was deployed to select the adequate number of respondents from each village, resulting in 152 respondents sampled in Mukhra village, 144 in Khandala village, 184 in Telakantigudem village and 196 in Darveshpuram village. Further, these sampled respondents are separated based on gender and age consisting of two groups such as 1) 15 to 35 years and 2) 35 to 60 and above. It means both the gender are given equal proration in being selected to be

interviewed, as well as each gender is further split into two equal sets based on two age-groups stated above. This study has relied on ODK-tool software, from which a questionnaire having 62 questions was prepared. This software-based questionnaire was found to be easier for entering answers, more durable as compared to carrying schedules, and aides in entering the empirical data/information into the Excel File online while procuring primary information from the respondents in the field. After the field visit is completed, this empirical data was transferred into SPSS file from MS Excel file.

Findings

- The analysis of usage of mobile phone shows that the more developed villages- Mukhra and Telakantigudem have more smartphones. Yet, interestingly, respondents with no phones also emerge from the Mukhra villages. Where (12.5 per cent) having no phone in Mukhra village similarly, Telakantigudem has 40.2 per cent respondents with no phone.
- In terms of the number of phones in a single household, both backward villages in the two districts Khandala and Darveshpuram have more mobile phone users in a single household. The better villages Mukhra and Telakantigudem households owned one phone each.
- Duration of mobile phone usage differs as respondents who have access to mobile phone for up to an hour per day is higher in villages which are having a low Antyodaya score. It is submitted that mere ownership and duration of usage of mobile is not the criteria for development.
- The usage in all districts is predictably calling, followed by YouTube access and WhatsApp. The difference is reflected when there is access for educational websites from Khandala and access to news and government schemes through mobile in Mukhra. It is evident that interior villages of Adilabad district show more diversity in access to internet than the villages of Nalgonda. Irrespective of Antyodaya standings, villages are accessing YouTube. Conclusively, Facebook penetration in rural population is irrespective of geographical reach from headquarters and Antyodaya ranking of the village.
- In case of online banking, in Mukhra village, around 32 per cent are accessing this service to fulfil all their necessities without visiting the departments concerned. Most people access online banking for making their bills and purchases, bus and train tickets bookings, and money transfer. Conclusively, online banking is accessed irrespective of the development of the district and its distance from headquarters.
- This study proves beyond doubt that the MeeSeva service is known, popular and accessed by both districts. This is generally accessed for Aadhaar card, certificate and cash withdrawal. Nalgonda villages have lesser disparity in MeeSeva access than Adilabad villages. Conclusively, awareness and consequent usage of government app and schemes become more when a district is located near the capital.

- The Biometric Services are being accessed in both districts for MGNREGA wages, PDS and pension. The better village of Adilabad, namely Mukhra village, a larger number of respondents (52 per cent) became aware of of the service offered by government apps but the proportion of such respondents in Khandala has only been restricted to 2.8 per cent. Among those who are aware of the apps, the majorly used apps related to agriculture followed by T Wallet and Paytm. In the case of both villages in Nalgonda, around 98 per cent are unaware of government apps, whereas government apps were found popular in the villages of Adilabad district. This shows that proximity to State capital did not enhance awareness access of government apps.
- The study shows that none of the respondents in both districts have adequate knowledge of apps. A lot of coverage was generated in newspapers regarding Aarogyasri but there is a wide disconnect in passing the information to the intended user. Respondents have suggested for installation of voice-based information instead of text in the local language.
- Regarding training, a large number of respondents, i.e., 77.1 per cent in Khandala and 50.7 per cent in Mukhra, desired to become aware of this app and its service. Similarly, 58.2 per cent in Telakantigudem and 62.2 per cent in Darveshpuram want to learn it through training. Most preferred way of training is YouTube and group discussion. In Nalgonda villages, the preferred method is coaching or demonstration. It can be inferred that YouTube as a method of imparting training is gaining popularity and more such online videos may be useful.

Conclusion and Recommendations

From the data collected, the following conclusions have been drawn. The study was carried out in 676 households having one respondent each with 296 households from Adilabad and 380 from Nalgonda. Most of the respondents in the age group of 15-25 and 35-55 years were found available to take the survey, although the proportions of members in various age groups are not the same in the two districts. About three-fourth of them covered by this study are married persons. Education levels in both districts show almost 40 per cent of the respondents as illiterate. Both districts showed that variation in the occupational pattern of the sample respondents with more farmers from Adilabad and more labourers from Nalgonda. Both districts had low income level but the expenditure levels in Nalgonda were higher. Family size of Adilabad was found to be higher than Nalgonda. Land ownership was high in Adilabad and 25 per cent of the respondents from both districts owned livestock. But vehicle ownership pattern was high in favour of Nalgonda.

Adilabad showed more owners of mobile than Nalgonda. Yet, 70 per cent of the mobiles owned were feature phones. More number of mobile phones per household was found in Nalgonda. Most people do not pay data bill and expenditure on mobile does not generally cross more than Rs. 500. Using mostly for not more than an hour a day, the major use of mobile is limited to calling. Interestingly, Adilabad was found to be more versatile in the usage of phone than Nalgonda. Online banking was used, mostly to pay bills. MeeSeva

centre and its usage is popular in both districts from where bill payments and Aadhaar related works are carried out. With very limited knowledge of apps, both districts showed that they were aware of it. They used T Wallet, Paytm and mKisan which were the more popular apps. The study reveals that Adilabad has more awareness of government apps than Nalgonda. Yet, the usage is very limited.

There is a conspicuous absence of any significant role of PRIs in facilitating digital knowledge transaction among the population. The biometric service is commonly used and extremely popular for MGNREGS works followed by PDS. The data reflects that Adilabad reports connectivity issues, yet the usage of mobile is more in Adilabad. So, it is inferred that private data providers are playing a significant role in providing the data in Adilabad. Entertainment is sought on mobile which is more popular in Adilabad. There is a general interest in learning about apps and their usage and to take training through YouTube/ demonstration and training.

Recommendations

Some of the recommendations inferred as reference of literature review and outcome of the basic research are enlisted below:

1. Local and State governments need to integrate their telecom regulatory, tax and rural development policies, and do more to incentivise and support the roll-out of mobile services across the country.
2. The mobile industry needs to understand the social impact of mobile connectivity in rural communities and to make it as accessible as possible to them. This does not only mean lower prices and costs of ownership. In order to make a real contribution to development, they will also need to localise the mobile experience with relevant applications and services. Many of these will be innovated at a grassroots level and it is important for the mobile industry to work at this level to deliver real improvements.
3. Non-governmental organisations have an important role to play in working with State agencies to define the needs of rural communities and to develop new ways together to deliver a wide range of different social and welfare services. To do this they also need to work much more closely with the mobile industry to understand and test the technological possibilities.

As a fall out of the research, the following interventions are suggested:

1. To facilitate online learning, YouTube videos were found to be popular. The government may initiate Telugu-based videos linked to apps to popularise schemes.
2. Education levels were not found to have a direct impact on phone usage; therefore, it is suggested that CSR along with NGOs like TITA may assist to popularise Internet literacy. Installation of the kiosk is necessary for regular practice.

3. A communication strategy and use of suitable communication tool, particularly online advertisements and voice-based SMS or calls, may be made an essential tool for generating awareness in media campaigns organised by the government for its policies.
4. To increase the number of smartphones and lower the number of feature phones in use - the government may help any start-up to launch a smartphone within Rs. 500 for increasing access.
5. This phone may have a built-in facility of apps related to government schemes.
6. A directory of apps and links is necessary to ease out information overload.

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SUCCESSFUL GRAM PANCHAYATS' OWN SOURCE REVENUES: CASE STUDIES OF SELECTED GRAM PANCHAYATS

Dr. R. Chinnadurai

Introduction

The 73rd Amendment resulted in creation of a three-tier local government in rural areas collectively referred to as Panchayat Raj Institutions (PRIs), viz. District Panchayat, Intermediate Panchayat and Gram Panchayat. Normally, a local government is assigned certain specific services for which it would remain responsible. Once such 'bundle' of services is assigned, ideally a commensurate 'bundle' of fiscal instruments is also assigned in order to enable the local government to discharge the services. The fiscal instruments made available to a local government may be classified into three groups, namely, (i) fiscal powers to raise revenue by imposing tax and/or different kinds of fees, rates, tolls, user charges etc., which is generally called Own Source Revenue (OSR), (ii) transfer from higher level government in 'tied' (conditional) or 'untied' (unconditional) form, and (iii) borrowing from market or financial institutions. A critical factor in improving the fiscal autonomy of rural local bodies is to help them enhance their own revenues. Improving own revenues will also strengthen the link between revenue and expenditure decisions of local rural bodies at the margins, which is extremely important to promote efficiency as well as accountability in the provision of services. The Thirteenth Finance Commission (TFC) highlighted the need for augmenting local government resources through better tax administration and improved collection efficiency along with the provision of better-quality services. Accordingly, the concept of performance-based grants was introduced for the TFC period starting from 2010-11. The Fourteenth Finance Commission (FFC) also re-emphasised the need to augment resources by GPs at the local level.

Sources of Funds of the Panchayats

All the available resources of Gram Panchayats may be classified into two categories, namely tied and untied funds. Untied funds include Own Source Revenues (OSR), statutory grant from State government and local contribution/deposits from the public, etc. Grants under Central Finance Commission may be considered as untied as the amount may be spent on any developmental works. All the State and Centrally sponsored schemes like MGNREGS, PMAY, PMGSY, Swachh Bharat Abhiyan, etc., are tied grants which are provided for specific purpose and the money has to be utilised according to the guidelines of the specific schemes. Therefore, higher level of untied resources indicates higher level financial autonomy (Fiscal Empowerment) of the GPs and vice-versa. In recent years, the total funds of a Gram Panchayat have increased manifold, but in reality, the question is about their freedom on financial autonomy to use the fund is not flexible. Therefore, the Ministry of Panchayati Raj has been insisting and motivating Gram Panchayats to make all efforts to create more and more of own source revenues for attaining fiscal empowerment of the Panchayats.

The present study has mapped the tax laws and lists the taxes and non-taxes that are collected by PRIs across the States selected for the study. A field study to understand the own source revenues of different types were explored and collected in detail. The study documented the strategies, process and practices of creating and maintaining the assets.

Objectives

This study is undertaken with the focus of following specific objectives:

1. To explore the different types of taxes earmarked to the Gram Panchayats and approaches for better achievement.
2. To study the sources of own revenues of the GPs and document the strategies, events and motivating factors of OSR.
3. To study the status of sustainability of OSR initiatives and people participation.

Study Area

Eight Gram Panchayats were selected from four States for documentation. Ponmundam and Muthuvallur GPs of Malapuram district in Kerala, Kanmangala GP from Bangalore rural district and Neralur GP from Bangalore Urban district in Karnataka were selected. In the State of Odisha, Mukundhapur Patna GP from Keonjhar district and Bonaigarh GP from Sundarban district were selected based on their rural tourism activities. In Tamil Nadu, Sivagripatti Village Panchayat from Dindigul district and Odandhurai Panchayat from Coimbatore were selected for their unique performance. The Panchayats were selected based on the highest OSR collection in the State as reported by the respective State Panchayat Raj departments.

Own Source Revenue in Kerala

As the Gram Panchayats in Kerala have been bestowed with larger expenditure responsibilities and are the only local bodies with taxation powers, an analysis of own revenue mobilisation is the first step towards understanding their strength and autonomy. The major revenue sources of Gram Panchayats include tax and non-tax revenue and State government grants. Own source contributes to around 18 per cent of the total revenue of Gram Panchayats; around 10 per cent of total revenue comes from taxes. For the last five years, the trend has been almost persistent indicating that there could be less effort on the part of local governments in mobilising own resources. The own source revenue of Gram Panchayats consists of tax and non-tax revenues. There are five items of taxes and around thirty items of non-taxes in the revenue basket. The five major taxes at present are Property tax, Professional tax, Entertainment tax, Advertisement tax and Service tax. Major items in non-tax revenue include receipt from sand mining, rent on land and buildings, market fee, licence fee, permit fee, registration fee, etc. The composition of the own source revenue shows that more than 50 percentage is contributed by tax revenue.

OSR for GPs in Karnataka

Karnataka is often cited as an important example of a pro-decentralisation State. This is mainly due to the earlier legislation passed by the State during 1983, which was regarded as a landmark. The State has only 2 per cent of the total Panchayats in India, and it mobilises almost 11 per cent of the total resources mobilised by the Panchayats in the country. A major part of their revenue is generated through tax collection. They also earn revenue through sale of certain items, leasing of property, collection of public donations, etc. The OSR of Panchayats are broadly classified into tax revenue and non-tax revenue.

Tax and Non-taxes (OSR)

Taxes: Panchayats are empowered to levy tax and revenue through tax imposition that forms part of their OSR. Taxes levied by GPs include i) Property tax including land tax and house tax, ii) Electricity charges, and iii) Water tax, i.e., general water tax and special water tax from individual households. Entertainment other than cinematography, tax on vehicles other than motor vehicles and advertisement tax.

Non-Tax: The following non-tax revenues are part of the GP's own revenue, earned through sources other than tax: i) License fees for sanctioning house plans, fees charged for issue of trade registration fees and vehicle registration fees, ii) Other fees like Jatra fees, development charges from private layout, notice fees, warrant fees, fines, market fees, slaughterhouse, mutton stall and chicken stall fees, bus stand fees and cart stand fees, iii) Income from permanent assets like rent from land and buildings, and iv) Local cess, sale of manure, sale of land, income from lease of properties like ponds, pounds and other miscellaneous assets.

Some important provisions to promote own sources of revenue in Karnataka

An important issue relating to the efficient functioning of Panchayats is the extent of autonomy enjoyed by these institutions in expenditure decisions. Financial autonomy has to be seen against the degree to which the Panchayat can take independent decisions regarding expenditure. Through guidelines issued from time to time, the State Government of Karnataka has placed certain restrictions on expenditure, which has to be met from the resources mobilised by GPs. Some of these important restrictions are as follows:

- The salaries of the Bill Collector and the Clerk should be paid out of own sources
- Honorarium of Adhyaksha and Upadhyaksha and their TA and DA bills should be paid out of own mobilised resources
- Staff pattern and their salaries are fixed by the government. Even if own resource mobilisation is very good, the staff cannot be paid higher salaries
- If the internal resource mobilisation by the GP is less than Rs. 30,000 per annum, it cannot recruit a Bill Collector or Clerk
- GPs should not spend more than 40 per cent of their own sources on salaries to Panchayat staff

- 20 per cent of the resources should be spent on development schemes for SCs and STs; and 10 per cent should be compulsorily spent on social forestry scheme
- Expenditure incurred on capacity building programmes of elected representatives of GPs should be met out of their own resources
- Expenditure on stationery and telephone bills should be paid out of own resources
- GPs should contribute a proportion of CFC grants from their own resources.

Own Source Revenue in Odisha

The Odisha Gram Panchayat Act 1964 and OGP Rule 1968 which were revised on 2014 States that taxes and fees mentioned under Section 83 are optional. The following taxes and fees may be levied by Gram Panchayat as per the statutory provision.

i. Vehicle Tax, latrine and Conservancy tax, Water rate, Lighting rate and Drainage tax,

ii. Fee on private market, animal brought for sale, regulating the movement of cattle, use of building or structures, shops, stalls in the market, slaughter houses/cart stands, license fee on brokers, commission agents and weighman,

iii. Rent from dealers temporarily occupying open grounds, toll fee or rate are the items on which Gram Panchayat is empowered subject to the approval of State government.

It may be mentioned here that the taxes such as Vehicle Tax, latrine and Conservancy tax, Water rate, Lighting rate and Drainage tax are coming under the tax category whereas the rest are coming under non-tax categories. Sections 83, 71, 55 and 91 of Odisha Gram Panchayat Act 1964 as well as Sections 32 to 56 of Odisha Gram Panchayat Rule 1956 empower Gram Panchayats of Odisha to collect tax and non-tax revenue for augmenting their resource base.

OSR Provisions in Tamil Nadu

Tamil Nadu's Panchayat finance is structured. The Panchayat has three revenue sources:

- Own revenues collected by the Panchayats themselves
- Devolved funds from the Centre and the State based on the formula assigned by the Central and State finance commissions
- Assigned revenues from taxes collected by the State for efficiency, but assigned entirely to Panchayats.

Own revenues, over which Panchayats have complete control, constitute only 10 per cent of the total revenues. These are mainly from the taxes that Panchayats can levy on their residents, such as house tax, profession tax, water tax, advertisement tax and some licenses and fees.

Rates of house tax - the largest source of own revenues - have not been revised in many years and are kept flat irrespective of the size of properties. Poor households actually

end up subsidising rich ones. If Panchayats were to increase their tax collection to even 2.5 per cent of village incomes, their own revenues would increase by 15 times. The State government has also abolished matching grants to the house tax collected, an incentive for better tax collection. Panchayats, thus, have to depend on devolved grants and pooled assigned revenues, which form two-thirds of the total revenue.

Rules framed By the Study States for Own Sources of Revenues for Gram Panchayats

Kerala	Karnataka	Tamil Nadu	Odisha
Taxes Fees Permit fees Registration fees Usage fees/Gate fees Income from Property – Rent Sundry Items	**Tax Revenue** – Property Tax, Water rate, vehicle, advertisement, hoarding, Factories, electricity Tax **Non-Tax revenues** – **Internal** – Fees and income from fixed Properties **External**: Grants from Central and State Governments **Assigned Taxes** – Entertainment Tax and stamp duty I**ncome from Rent and sale** **Interest from Interest**	**Tax Revenue** House Tax, Professional Tax, Advertisement tax, income from others 2. **Non-Tax Revenue** Licence fee, building fee, sand fee, income from trees, blue print approval, **additional income,** bank interest, old thing auction, sales tax, income tax etc. 3. **Assigned and Shared Revenue** 10% Surcharge on Stamp Duty, Local cess, 2C Patta Fee, Entertainment tax, Mines, Social Forestry receipts etc. **4. Grants - in aid** House matching grants, Matching grants for development works	Vehicle Tax, Latrine and Conservancy Tax, Water & Lighting Rate Drainage Tax, Fees on Private Market, Regulating the moment of cattle, use of building, structures, shop, stalls in the market, slaughter house, licence fee on brokers, commission agent and weigh men, rent from dealers occupying open grounds

Sources of OSR in the Case Study GPs

State	Gram Panchayats	Sources of OSR	Quantum of OSR
Kerela	Muthuvallur Gram Panchayat (Malapuram)	1.house tax collection, properties taxes and water user charges 2.indoor stadium and wedding hall, 3.Shopping Complex with 37 commercial units	1.32 crore
	Ponmundam Gram Panchayat (Malapuram)	1.house tax collection, properties taxes and water user charges 2.indoor stadium and wedding hall, 3. Shopping Complex with 34 commercial units (13 Lakh Rent & 34 lakh Deposit)	1.6 crore
Karnataka	Kanmangala Gram Panchayat (Bangalore rural)	Land Tax Tax on Building, General Water Charges Street Light Charges	4.13 crore
	Neralur Gram Panchayat (Bangalore urban)	Land Tax Tax on Building, General Water Charges Street Light Charges	9.66 crore

Contd...

State	Gram Panchayats	Sources of OSR	Quantum of OSR
Odisha	Mukundapurpatna Gram Panchayat (Keonjar)	pilgrimage centre namely 'Maa Tarini Temple' Decent lodging, open marriage hall eco- amusement park and collects entry fee vehicle parking hundred small shops market complex Fee from vegetable vendors weekly market local tourism	30 lakh
	Bonaigarh Gram Panchayat (Sundargarh)	i. Market Complexes ii. Daily market iii. Weekly market iv. Slaughter House (Kanshei Khana) v. Big ponds	9.3 lakh
Tamil Nadu	Sivagiripatti Gram Panchayat (Dindigul)	Palani Murugan Temple House tax Property Tax Buildings and hot Institutional Commercial Establishment Rental from the shops Entry Fees Other fess - Sales	60 lakh
	Odandurai Gram Panchayat (Coimbatore)	1. Electricity Generation through 2. Wind mill 3. Water Tax	25.2 lakh

Utilisation of OSR Funds for Development

State	Gram Panchayats	Activities undertaken out of OSR
Kerela	Muthuvallur Gram Panchayat (Malapuram)	Salary of the Staff, Palliative care support, Physiotherapy centre, scholarship for studies, Efforts on Energy Saving, Drinking Water and Sanitation, construction of modern and fully equipped buildings for all government-owned institutions
	Ponmundam Gram Panchayat (Malapuram)	Salary of the Staff, Office Maintenance, creation of all sectoral Infrastructures
Karnataka	Kanmangala Gram Panchayat (Bangalore Rural)	Construction of Shops, buildings, street light, water tanks, vehicles, office equipments, village roads and drainages, upgradation of School buildings, salary of staff and honorarium for ERs
	Neralur Gram Panchayat (Bangalore Urban)	Construction of Shops, Office buildings, street light, water tanks, vehicles, office equipment, village roads and drainages, upgradation of School buildings, salary of staff and honorarium for ERs
Odisha	Mukundapurpatna Gram Panchayat (Keonjar)	Salary for staff, WIFY Charges, renovation and upgradation of Office of the GP, Athma Tripty Yojana (Lunch for Rs.5), Mera Bharatsar Scheme (1000 BPL), Kanyadhan (25000 marriage), Mor Sahara Scheme (2000 NC)
	Bonaigarh Gram Panchayat (Sundargarh)	Office Maintenance, Salary for staff, maintenance of drainages, supply of drinking water
Tamil Nadu	Sivagiripatti Village Panchayat (Dindigul)	Payment of electricity, office maintenance, Maintenance of civic activities and creation of development works, welfare activities for pilgrimages

Determinants of OSR - Observations from the Field Study

⇒ **Location**: The history of own source revenue in majority States has similar scenario in the context of location of the Gram Panchayats. The present case analysis also reflects that the Panchayats having higher own source revenue are located closer to the urban area or on the periphery of cities. The influence of urban culture has made people responsible citizens and pay taxes to the Gram Panchayat without much force from the Gram Panchayats.

⇒ **Land and property value**: As it has been noticed, the Gram Panchayats located in the urban periphery gets higher value of properties like land and building. Because of the higher value of the properties, the owners and users make all periodical payment of taxes and registration of documents. Unlike the rural areas where the property values are very less, the possibility of encroachment is very minimal, and therefore people are reluctant to pay tax in interior villages of the Gram Panchayat.

⇒ **Natural Opportunities**: It is found that many Gram Panchayats in the case study region are gifted with resources like mines, industrial zones, airport authority establishments and many other natural resources. Such Gram Panchayats take a lot of initiatives to use locally available resources for income generation. A few GPs also have rural tourism spots that attract a large number of visitors which give them opportunity to generate income.

⇒ **Quality of Leadership**: It is essential to note that the quality and efficiency of the Panchayat leaders play a vital role in creating own source of revenue for the Panchayat and also its overall development. Committed leaders naturally have motivation to work towards development of the region and people. These motivated leaders make all efforts and initiatives to find different sources of funds for implementation of development and welfare schemes. Creation and mobilisation of own sources of income for the Panchayat are one such essential activity to usher in development. Therefore, motivation and capacity building of the elected representatives of the Panchayats is prerequisite for own source revenue (OSR).

⇒ **Commercial Establishments**: Availability of commercial establishments within the jurisdiction of the Gram Panchayat is a perennial source of its income. For example, the location of airport and other multinational companies in the Kannamangala Gram Panchayat and industries and industrial estates located in Neraleru Gram Panchayat of Karnataka receive fair income in the form of property tax, profession tax and entertainment tax. Revolving around these major establishments, a number of supporting ancillary commercial units are coming up, which give additional income to the GPs.

⇒ **People's Participation and Coordination**: Inevitably, people's participation in development activities is an important source of implementation of a number of low cost and less cost activities. People's contributions are also very important source of income to the Panchayats. Proper strategy and approach will fetch good source of funding for bridging gap of government funding.

⇒ **Pilgrim Centres:** The pilgrim centres serve as better source of revenue generation. For example, Sivagiripatti Gram Panchayat in Tamil Nadu is having famous temples which receive devotees throughout the year and heavy crowd during few seasons. Similarly, Mukundapurpatna in Odisha also created a number of economic activities revolving around the temple.

⇒ **States' Pro-activeness**: Role of respective States in devolution of financial powers to the local bodies, especially Gram Panchayats, is keen to motivate and activate the GPs to act on financial empowerment. States like Kerala and Karnataka have delegated powers taxation to the Gram Panchayats. But in the case of Odisha, there is no provision for house tax collection by any of the authority in the rural areas. Therefore, GPs in Odisha find lot of financial crises even to meet the day-to-day expenses and electricity of the GP office. In the case of Tamil Nadu, due to vote bank politics, even though tax collection power vested with the Panchayat, the GPs will not collect taxes from the people but the elected representatives or secretary pay the house taxes on behalf of people. This practice downgrades the citizen's responsibility.

⇒ **Incentives**: The Ministry of Panchayati Raj, Government of India has initiated many incentives in terms of awards and cash prizes for the better performing Panchayats in creation and mobilisation of own source revenues. The Fourteenth Finance Commission also provides performance grant by considering OSR as one of the indicators of performance. Government has been insisting the Panchayats to create at least 10 per cent of the annual budget as OSR funds. It is essential to seriously screen the GPs who are really performing well in generation of own revenues and encourage them in terms of supplementary grant which will attract many Gram Panchayats to think about creation of own revenues.

⇒ **Freedom of Expenditure**: Many Gram Panchayats are of the opinion that the freedom of expenditure and related decisions on the revenue generated by the Gram Panchayat is not given to the Panchayats. In majority of the States, the administrative mechanism at Block and District level interferes in the decision-making process of OSR spending. This practice may hurdle the revenue generation strategic motivation of the local players or disincentives the motivation of the stakeholders of the Panchayats.

⇒ **Essential Needs for Life**: A number of Panchayats have made voluntary efforts and achieved success in mobilisation of funds to implement the projects which are most important for human survival within their Panchayat. For example, to meet the expenses related to drinking water, sanitation, entertainment, education, etc. People come forward and contribute to build structures to meet the essential needs without depending much on government sources of funding.

⇒ **Development Interest**: It is understood from various literature as well as the field interaction that if the elected representatives and official mechanism have enthusiasm towards the development, they find alternative sources of funds to implement the development projects aimed at the comprehensive development of the Gram Panchayat. The Panchayat requires huge initiative on capacity building, and attitudinal

and motivational training for creating 'development interest' among the stakeholders and enabling them to look for available avenues of income for the development of their region.

Recommendations

⇒ The Gram Panchayats need to be equipped with at least one functionary to look into revenue collection, demand management and other issues so far as own source of resources are concerned. Since the existing functionaries are tightly occupied with implementation of development programmes, they are not in a position to concentrate on augmenting revenue envelope of Gram Panchayats.

⇒ The Gram Panchayats need to be given functional autonomy to spend their own source of revenue as per their local requirement without seeking approval from the State. They may also be permitted to engage non-governmental organisations or self-help groups to collect tax and non-tax revenue as per the State law on nominal commission basis. This may increase the collection efficiency of Gram Panchayats and greater mobilisation of own source of revenue.

⇒ Though inter-governmental transfer of resources is inevitable to the Gram Panchayats, a system needs to be developed to incentivise untied grants given to Gram Panchayats on the basis of revenue mobilised by them. This may induce healthy competition among the rural local bodies to enhance their revenue base and providing basic services to its citizens.

⇒ Income-generating assets like market complex, water bodies, community utility assets such as info-theatre, market complex, etc., need to be created at Gram Panchayat level, which can facilitate to augment the revenue envelope of the rural local bodies.

⇒ Gram Panchayats need to enhance their quality of basic services such as drinking water, street lighting at villages, drainage, garbage disposal, cleaning of roads, etc., so that its citizens feel the value of getting necessary basic services in lieu of paying tax.

⇒ The tax net needs to be widened as per the current scenario with levying of appropriate amount. The tax administration needs to be simplified and based on objective assessment with little scope for free riders. Those who pay the tax in advance needs to be given with a tax rebate.

⇒ Last but not least, capacity of the elected representatives and officials of the Panchayati Raj Institutions needs to be enhanced through regular training programmes, performance reviews so that they feel the importance of revenue mobilisation at the local level.

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CAPACITY BUILDING AND TRAINING OF ELECTED WOMEN REPRESENTATIVES IN PANCHAYATI RAJ INSTITUTIONS OF MANIPUR

Dr. Pratyusna Patnaik

Introduction

Two decades of the adoption of the 73rd Amendment to the Constitution, which increased the representation of marginalised groups in elected positions, their presence remains limited by their non-participation, low status, dominance of other gender in the patriarchal community structures. There are few concerns that have emerged from the field experience of working with Gram Panchayats, and one of the main reasons is lack of capacity of the elected representatives, especially Elected Women Representatives (EWRs) in Panchayat institutions to perform their constitutionally mandated tasks. Thus, the Capacity Building and Training (CB&T) of the EWRs becomes a vital component of empowerment at the local government.

In this connection, the National Institute of Rural Development and Panchayati Raj (NIRDPR), Hyderabad, in collaboration with the National Commission for Women (NCW), GoI, New Delhi, endeavours to undertake massive capacity building programme in a planned manner and on a saturation mode for Elected Women Representatives in two tiers of the north-eastern State of Manipur to empower them to work for the holistic development of rural areas.

Objectives

The primary objective is to strengthen capability of EWRs in order to better understand and perform their functions.

Methodology

The study is descriptive and analytical in nature where data was collected in accordance with the requirement and applied different tools and techniques to analyse the knowledge levels and the impact of training programmes in governance improvement in Panchayats. A checklist was used to conduct interviews with trained and non-trained elected women representatives of PRIs, focus group discussion and interaction with other stakeholders. A sample of 480 EWRs was drawn for the study from the three selected districts of Jharkhand through stratified random sampling.

Study Areas

The CB&T training was conducted during the financial year 2017-18, targeting to

sensitise a total of 880 newly elected women representatives. They comprised 67 Pradhans, 787 Ward members and 26 Zilla Parishad members from six PR districts of Manipur, namely Imphal-East, Imphal West, Thoubal, Bishnupur, Kakching and Jiribam .

Findings

The EWRs has gained their leadership qualities through the CB&T such as vision, planning, relationship building, transparency & accountability, decision-making, gender consciousness, Panchayat management and mobilising people, etc. The perspectives of social development have been changed after the capacity building and training; for example, creating awareness of girl's education, sensitising women regarding gender issues, ensuring the health of women and children, etc.

The capacity building training programme provided a platform for the EWRs to understand the issues and problems of villagers which completely changed their attitude towards work. The training provided collective knowledge to the EWRs and they acquired skills to generate resources to fulfil the needs of Panchayats. They were also able to function as an agent between the government and the people.

Conclusion

The capacity building training of EWRs in Manipur has transformed and strengthened them from passive, non-participating members to confident, active and responsible members of the community. This fact is easily justified with the pre-evaluation of the training programme, which was conducted before the training with a structured questionnaire to measure their awareness level about their role and responsibilities and level of confidence. It was found that majority of them were not aware of the basic provision of the Panchayat Raj Act, Central and State schemes, use of information communication technology, preparation of GPDP, etc. However, after the training programme, they were seemingly more confident and were aware of many government schemes.

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UNDERSTANDING GENDER DIFFERENCES IN NUTRITION IN RELATION TO WOMEN'S ACCESS TO FOOD PRODUCTION IN RURAL INDIA

Dr. Ruchira
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Introduction

Evidence across the world has time and again established a link between gender-based discrimination and under-development indicators such as malnourishment. India too has faced massive challenge of widespread malnourishment and under-nutrition, especially among its women and children, with anaemia in near 50 per cent of woman, and stunting and wasting in almost 33 per cent children (Kant, 2017). The interventions targeted towards reducing malnourishment are mostly social protection programmes. A vital question is whether social protection is enough when the access to food and livelihood is highly segregated by gender. This research tried to analyse the linkages between gender gap in nutritional outcomes and equity in access to food production in terms of resources and decision-making processes and in turn, identify the exact dimension of women empowerment, which can be instrumental to reducing malnourishment.

Objectives:

Broadly, the research aspired to find out the linkages between women's decision-making power within farming systems and nutritional outcomes, such as chronic energy deficiency, incidence of disease and low dietary diversity. The major objectives were:

a. To explore the levels of women empowerment and nutritional scenarios of study area in terms of nutritional intake and outcome of population.

b. To decompose women's access to farming decisions by its constituent factors to observe the most important contributor to empowerment.

c. Explore the linkages between women's empowerment within farming system – its contributory indicators and nutritional outcome and gender gap in nutrition within households.

d. Daily dietary consumption data was collected for each individual to construct an Individual level Dietary Diversity Index. Other than this, the height and weight of members was collected to identify persons <18.5 BMI in the households. Finally, data on morbidity was collected to construct frequency of disease of individuals.

Methodology

A multi-stage, probability proportionate random sampling procedure was used for collecting the data. Primary data collection of 578 agricultural dual-households from March to May 2019 was funded by the National Institute of Rural Development and Panchayati Raj, Ministry of Government of India, Hyderabad, India. The index of women empowerment was a key predictor along with the geography or agro-ecological location of the household. Nutritional outcomes, i.e., low BMI, morbidity occurrence and low dietary diversity index score at individual level and an abbreviated Food Insecurity Experience Scale at household level were constructed as outcome indicators. Concentration Index and Multi-variable logistic regression were conducted to analyse the linkages between women empowerment levels and nutritional outcome.

Study Area

The study sample were drawn from villages in eight districts in four States, namely Telangana (Vikarabad and Karimnagar), Tamil Nadu (Erode and Virudhnagar), Madhya Pradesh (Hoshangabad and Sidhi) and Punjab (Mansa and SBS Nagar).

Findings:

- The WEAI for the sampled four States was 0.738 with a 5DE sub index value of 0.725 and the GPI sub index value of 0.861, meaning that only 37.45 per cent of women were empowered. Only 56.95 per cent of women had gender parity in decision-making with the primary male members in their households.
- Decomposing the 5DE of the overall surveyed areas of India exhibited that the domains contributed the most to women's disempowerment are lack of leadership in the community (29.42 per cent), low leisure time (21.95 per cent) and less input in productive decisions (20.92 per cent).
- The results showed a clear north-south divide in the distribution of power and a negative relation with asset-levels supporting the land-holding patriarchy hypothesis. The surveyed women in Tamil Nadu had highest levels of empowerment, followed by Telangana, Madhya Pradesh and lastly Punjab which showed very low level of empowerment.
- Disaggregating the combined Malnutrition outcome Concentration Index Scores, it was observed that Telangana was the only State with an almost 0 inequality in malnutrition. However, in other States, the malnutrition was highly concentrated amongst the poor with MP showing the highest and Tamil Nadu showing lowest inequity.
- The odds of performing gender-negative in the combined malnutrition indicator (low dietary diversity score and living in household where number of underweight women are higher than underweight men) was 64 per cent higher in the households with no gender parity compared to households with gender parity.

- At the same time, the odds of a household facing food insecurity above moderate was lower if it was a household with low gender parity compared to the households with gender parity and in the medium and high asset classes compared to low asset households reflecting a non-linear relation between women-empowerment, gender-parity and wealth.

Conclusion:

A few important policy recommendations came out of the results.

- Firstly, the States of Punjab and Madhya Pradesh need to re-energise their SHG-based programmes for an immediate upliftment of women. Punjab and MP also need to address illiteracy and lack of control on income and decision-making among adult women in the village – both of which can be addressed through SHGs. In the sampled households of Telangana, standard of living was a bigger problem followed by lack of financial security among rural households.
- Secondly, the study shows that the malnutrition gap exists within household men and women can be reduced by a huge percentage if gender parity in household decision-making around production system can be improved.
- Thirdly, as per the results, gender parity in farming system decision-making will also ensure a better dietary diversity. Since inadequacy in the leadership domain was the major contributing factor in disempowering women, the study strongly recommends an overhaul of the community development and mobilisation programmes to address women's participation and access to resources in the studied areas.

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ANALYTICAL STUDY ON ACTUAL REQUIREMENT OF MANPOWER IN PANCHAYATI RAJ INSTITUTIONS OF ANDAMAN & NICOBAR ISLANDS

Dr. C. Kathiresan
Dr. Pratyusna Patnaik
Shri Mohammed Taqiuddin

Introduction

After the 73rd Constitutional Amendment, the Andaman & Nicobar Islands (Panchayats) Regulation 1994 was notified on 8th December, 1994, to establish Panchayats as institutions of local self-government as per Part IX of the Constitution. Accordingly, a three tier Panchayati Raj Institutions (PRIs) started functioning in A&N since October 1995. The Andaman & Nicobar Panchayats regulations made mandatory provisions such as Gram Sabha, reservation for women, election commission and finance commission, etc. Above all, it is pertinent that to function as an institution, it requires the full-fledged manpower to enable the smooth functioning of Panchayats and service delivery. Within this context of enabling Panchayats as an agent of service delivery, the study conducted an analytical study on the requirement of manpower in PRIs in the UT so that the present issues of the manpower can be sorted out through appropriate remedial measures.

Objectives

The main objective of this study is to undertake a structural and functional review of the PRIs and assess the actual manpower required in order to strengthen the system of rural local governance in A&N.

Methodology

The methodology of study includes gaining the organisational understanding of the PRI system as existing in the UT by carrying out a detailed analysis of the Provisions of A&N Panchayat Regulations including the functions, funds and functionaries (3F's) devolved to PRIs by obtaining required information from the RD&PR department of UT of A&N. Interactions were held with the elected representatives, Staff and Officers of PRIs to discuss the workload and actual requirements of manpower for strengthening PRIs.

Study Areas

Andaman & Nicobar Island, PRI systems

Findings

The elected representatives and officials of Gram Panchayats informed that the Gram

Panchayats would be able to spend more money as per the statutory allocation, subject to further strengthening the Gram Panchayats. During discussions with elected representatives and officials, it is informed that staff transferred to Panchayats normally perform only the functions related to their parent department and they are controlled by the officials of the line departments concerned . Similarly, a VLW is stationed at each Gram Panchayat from CD Block. But the role of the Gram Panchayats in the supervision of VLW is not clearly defined. During the visits to the Gram Panchayats it is noticed that no Gram Panchayat is collecting taxes except certain non-taxes such as fee and rents, etc. The qualified DRMs available in the Gram Panchayats need to be trained as bill collectors for assessment and collection are collecting the tax and non-tax revenues of Gram Panchayats.

During interaction with the staff of PRIs, it is observed that there is a pressing demand on the part of Panchayat Secretaries of the Gram Panchayats for creating channel of promotions for them such as Block Development Officers, Panchayat Inspectors and Assistant Planning Officers, etc. But it is noticed that so far, no service rules of Panchayat Secretaries are issued indicting the channel for promotions. Consequently, the Panchayat Secretaries in A&N are working in the same post for more than 20 years without any promotion. Working in the same cadre for years together without a scope of career advancement is a causing widespread dissatisfaction among them.

Conclusion

Taking into account the functional and financial responsibilities of the PRIs and the manpower already available at their disposal, there is no case for recommending creation of additional manpower in PRIs. However, keeping in view the analysis carried by out by the study team in respect of functions and functionaries of Panchayats, about 4-5 regular employees in different categories are working in each Panchayat Samiti. In view of this, an exercise need to be carried out by RD&PR department for redeployment of staff of the Panchayat Samiti between Gram Panchayat and Zilla Parishads as per requirement. For the efficient functioning of an institution, the primary prerequisite is to have a contended workforce. It is not only the emoluments, perks and privileges that motivate an employee to give his/her best but also a systematic career progression.

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PILOT SOCIAL AUDIT ON NSAP IN FIVE STATES (ASSAM, HIMACHAL PRADESH, MAHARASHTRA, ODISHA & TAMIL NADU)

Dr. C. Dheeraja
Dr. Srinivas Sajja
Dr. Rajesh. K. Sinha

Introduction

In compliance of the Directive Principles of State Policy and Article 41 of the Constitution of India, the Government of India introduced the National Social Assistance Programme (NSAP) as a fully funded Centrally Sponsored Scheme on the Independence Day of 1995. The programme initially targeted the destitute, who is defined as any person who has little or no regular means of subsistence. From the year 2007, the programme was expanded to cover all eligible persons below poverty line.

The Programme has following components:

1. Indira Gandhi National Old Age Pension Scheme
2. Indira Gandhi National Widow Pension Scheme
3. Indira Gandhi National Disability Pension Scheme
4. National Family Benefit Scheme
5. Annapurna Scheme

Social Audit in NSAP

In addition to MGNREGS, only Andhra Pradesh and West Bengal are doing social audit of NSAP. As per the letter no. J-16019/01/sop-NSAP, MoRD asked National Institute of Rural Development and Panchayati Raj (NIRDPR) to facilitate pilot social audits in Assam, Himachal Pradesh, Maharashtra, Odisha and Tamil Nadu.

Scope of NSAP Social Audit

In addition to the four components under National Social Assistance Programme (Indira Gandhi Old Age Pension Scheme, Indira Gandhi National Widow Pension Scheme, Indira Gandhi National Disability Pension Scheme and National Family Benefit Scheme), the State-specific pensions schemes implemented by the state governments were also taken up for social audit.

The scope of the social audit primarily covered the following:

1. Whether processes as specified in guidelines, have been followed, compliance with eligibility criteria

2. Whether the processes specially the selection process followed have been transparent
3. Is there wait list and the priority list
4. Awareness levels among intended beneficiaries about their rights and grievance redressal mechanisms
5. Participation of intended beneficiaries in the Gram Sabhas/meetings meant for them
6. Selection of beneficiaries- whether as per BPL/SECC list, Proportion of marginalised communities, inclusion and exclusion errors
7. Payments- timely payments, mode of payment
8. Accountability
    a. Whether there have been instances of corruption, bribing, etc.
    b. Measures taken to avoid malpractices and corruption
    c. Grievance redressal mechanisms
    d. Instances of grievances/complaints and duration of resolving those grievances/ complaints.

Selection of GPs for Social Audit

Five pilot social audits of NSAP were taken up in five States where both the rural and urban areas were covered. The States were identified on the basis of geographical location. — Tamil Nadu from south, Maharashtra from West, Odisha from East and Himachal from North and Assam from North-east. In Maharashtra and Odisha urban areas were also covered. Selection of GPs and Urban Local Body were based on the discussions with the implementing agency focusing on MGNREGA calendar and highest number of beneficiaries.

S.No.	Pilot Social Audit Dates	State Name	Districts	Block/ Taluk/ Tehsil	GP Name/ Semi Urban
1	31st Dec 2018 to Jan 12 2019	Tamil Nadu	Villupuram & Chennai	Vanur & Guindy	Royapudupakkam & T.Nagar
2	23rd Feb 2019 to 1st March 2019	Odisha	Nayagarh	Ranpur	Rajsunakhala
3	28th May 2019 to 6th June 2019	Maharashtra	Latur	Latur	Bhadgao, Bamini & Ward no 6(latur Town)
4	03rd Aug 2019 to 09 Aug 2019	Assam	Kamarup (Metro)	Rani	Kahikuchi
5	12th Sept to 21st Sept 2019	Himachal Pradesh	Kangra	Baijnath	Bhattu-Panjala

Social Audit Process

Social Audit was facilitated by a team of resource persons from NIRDPR. Social audit team members include resource persons with expertise in the area of social audit from SAUs of the State concerned and local residents who are impacted by the NSAP.

The following steps were carried out:

1. Meeting with Block officials and Urban Local Body and developed social audit plan
2. Collected the required information for the conduct of the audit
3. Formed social audit committees with adequate representation from marginalized groups and resource persons
4. Training on the social audit process for the social audit committee members
5. Met CBOs, beneficiaries, banks, implementation staff and elected representatives
6. Verified the information collected and cross-checked it through field visits, met community members and had focus group discussions and interviewed individual beneficiaries
7. Collated and consolidated information into simple and understandable formats for public understanding
8. Convened a public meeting of all stakeholders where the findings of the social audit exercise were presented
9. Follow-up meeting with block and implementing officials regarding follow up action was done.

Findings of Social Audits

1. Tamil Nadu

Positives – State contributes a significant amount and all beneficiaries get Rs.1000 per month, assistance provided to abandoned women and single women, separate MIS for management of both state and NSAP pensions; amount is distributed through banking correspondents:

- State has additional criterion – person should be destitute and should not have relatives
- BPL list is not widely available and people do not know about what BPL list is
- Coverage is poor; many new applications from people are interested in receiving pension
- People have to approach middlemen and pay huge amounts to get sanction of monthly pension; they also have to pay commission to get benefit under NFBS
- Pension of many beneficiaries was stopped in urban areas citing 'No such person' as reason, but people are living in the same place

- Pension of many people were cancelled saying that person has a son though there is no such criterion
- Pension of people stopped because they do not have Aadhaar card
- Private banks charge money for withdrawal of the pension amount even though the State government pays them Rs.30 per beneficiary per month
- Many people are not able to withdraw money due to mismatch of Aadhaar data, mismatch of fingerprints
- MIS reports are not publicly available and grievance redressal is poor.

2. Odisha

Positives – Beneficiaries from BPL List; Additional State scheme (Madhu Babu Pension Yojana) which compliments NSAP well; High percentage of population receives pension; No fake entries; Monthly payment, convenient cash distribution at Gram Panchayat, transparent payment, no need to pay commission; door-delivery for people who cannot come to GP to collect pension:

- People have to apply through CSCs which charge more than the prescribed amount. No MIS for State schemes
- Applications from differently-abled people are pending due to bottlenecks in generating UID
- Registers are not maintained at the Panchayat and block levels
- Many pending applications some of them since 2017 while recently submitted applications have been processed
- People apply multiple times and grievance redressal system is weak
- No support for particularly vulnerable groups
- **NFBS –** paid after long delay; few applications have been lost in block office; applicants are sanctioned out of order; rejected applicants are not told the reason; there is corruption.

3. Maharashtra

Positives – Most people receive Rs.600, differently-abled people receive Rs. 800 or 1000; State schemes cover orphaned children, people suffering from critical illness, divorced women and women going through the process of divorce

- Changes to NSAP guidelines - only people above 65 years are eligible instead of 60
- One of the lowest coverage States and there is a big demand both in rural and urban areas
- Annual verification is not done, more than 20 per cent of beneficiaries in two Panchayats are not alive

- Scheme implemented by revenue department; Gram Sabha has no role in the implementation of the scheme; an unelected committee at the taluk level approves applications
- Difficult application process and people rely on brokers
- Payment is not regular
- Difficulty in withdrawal of money and people have to pay commission to withdraw money
- Well-off people in urban areas are receiving pension
- Urban area verification is not possible since the address of the beneficiary is not available. The data is also arranged by bank not ward
- MIS – Significant differences between beneficiary list in MIS and payment list, no MIS for state schemes
- Grievance redressal process is weak

4. Assam

Positives – DBT, recently introduced state scheme increases coverage

- State matching contribution is only Rs. 50 for old age pension. No matching contribution for widows and differently-abled persons.
- Allocation not as per BPL List (BPL numbers were entered in MIS only for 32 per cent of beneficiaries). BPL list is not widely available.
- Annual verification is not done. More than seven per cent of beneficiaries are not alive some of them are dead many years ago. Many people were untraceable.
- No sanction for beneficiaries in nearly three years even though the number of beneficiaries is less than the sanctioned number
- State payment is made regularly, but NSAP payment is not regular
- NFBS – Difficult to get, people have to approach MLA. They have to pay commission to PRI representatives
- No record of pending applications either in the MIS or in registers
- Poor record maintenance – no register with current beneficiaries, no copies of processed application forms; no photo, no address, wrong village name in MIS.

5. Himachal Pradesh

Positives –State contributes a significant amount and all beneficiaries get Rs. 850 to 1500 per month, assistance is provided to widows, single women, disability, rehabilitation allowance, transgender:

- There are no corruption practices in the implementing of the scheme

- For every beneficiary, a Post office ATM card was given and also beneficiary can withdraw the money from Branch Post Office and for those who cannot walk, pension will be delivered at doorstep
- Pension is disbursed for every three months
- Annual verification of pensions is not being done.

Few Photos

	
Gram Sabha in Tamil Nadu	Door-to-Door verification in Odisha
	
Field Verification in Assam	NSAP Social Audit Gram Sabha in Assam
	
Collection of Grievances in Maharashtra	NSAP Social Audit Gram Sabha in Odisha

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SOCIAL AUDIT REPORT OF PMAY (U) IN ANDHRA PRADESH

Dr. C. Dheeraja,
Dr. Srinivas Sajja

Introduction

Pradhan Mantri Awas Yojana – Housing for All (Urban) Mission seeks to address the housing requirement of urban poor including slum dwellers through verticals, namely

- Slum rehabilitation of slum dwellers with participation of private developers using land as a resource
- Promotion of affordable housing for weaker section through credit linked subsidy
- Affordable housing in partnership with Public & Private sectors (AHP)
- Subsidy for beneficiary-led individual house construction (BLC)/enhancement.

Beneficiary Led Construction (BLC) and Affordable Housing in Partnership (AHP) are the two verticals that have been taken up in Andhra Pradesh. BLC is meant for people who own small plots but do not own a pucca house. Under BLC, the Central Government gives each beneficiary Rs. 1.5 lakhs and the State government gives another Rs. 1.0 lakh. Beneficiary should construct a house with a minimum area of 411 square feet. Under AHP, apartment blocks (ground floor + 3 floors) are being constructed by private companies and these houses are allotted to people who do not have own any pucca house and do not have any land for construction of a house. There are three agencies that are involved in implementation of PMAY (U) in AP. 1. Andhra Pradesh Township and Infrastructure Development Corporation (APTIDCO), is the nodal agency in charge of the overall implementation of PMAY (U). In addition, it is also responsible of awarding contracts to different companies for building apartment blocks and monitoring the construction. 2. Urban Local Bodies (ULBs) prepare Housing for All – Plan of Action (HFAPoA), process applications from people and allot houses to beneficiaries. 3. Andhra Pradesh State Housing Corporation (APSHC) monitors progress and releases payments to individuals for the individual beneficiary led housing construction (BLC) projects.

Under AHP, as on July 2018, 501429 houses have been sanctioned and tenders have been finalised for 4,52,654 houses. Eight companies have been awarded contracts for building the houses (Vijay Nirman, NCC, L&T, KMV, Shapoorji, KPC, TPL and Simplex Infra) and the houses are in different stages of construction. So far, 12800 houses have been completed. Under BLC, GoI has sanctioned 2,15,071 houses.

Social Audit is a process by which the people, the final beneficiaries of any scheme, programme, policy or law, are empowered to audit such schemes, programmes, policies and laws. Social audits tried to ensure that the activity or project is designed and implemented in

a manner that is most suited for the prevailing (local) conditions, appropriately reflects the priorities and preferences of those affected by it, and most effectively serves public interest. Pradhan Mantri Awas Yojana – Housing for All (Urban) guidelines mandates the conduct of social audit and thus on demand of APTIDCO, NIRDPR facilitated social audit in 9 ULBs.

Social Audit Methodology

Andhra Pradesh has a total of 118 ULBs. It was decided to facilitate social audits in nine ULBs as per the Social Audit Guidelines issued by the Ministry of Housing and Urban Poverty Alleviation. Five ULBs with the highest number of BLC houses and four ULBs with the highest number of AHP houses were chosen for the social audit. Based on this criterion, the ULBs selected were Greater Visakhapatnam Municipal Corporation, Guntur, Dharmavaram, Vizianagaram, Rajahmundry, Kurnool, Bhimavaram, Nellore and Gudivada. Social audit was limited to Beneficiary Led Housing Construction (BLC) Affordable Housing in Partnership (AHP). Seven Social Audit Facilitators (including VRPs) and one Technical person were in the social audit team. Interviews/interaction were conducted with APTIDCO, ULB, CLTC, Developers, APSHC, DLSC- Municipal Chairmen and Counsellors, MEPMA, Potential beneficiaries, AHP and BLC beneficiaries. Social audit process included document verification, physical verification of houses, focus group discussions and public hearing.

Detailed Project Reports, Agreements of APTIDCO, HFA POA and implementation plan, Applicants list, Detailed Allotted list, Applications from Beneficiaries from ULB, Random Measurement Books, BLC detailed lists, payment details, B form register from Housing Corporation, BLC details, photographs from APSHC website, progress report QC reports, Site register, etc., from developer and ration card, Aadhaar card, bank passbook if BLC beneficiary, power bill, Receipts, from beneficiary level were verified.

Details of social audits conducted, no. of beneficiaries met, no. of FGDs conducted, date of public hearings conducted and the details of presiding officer are presented below:

S. No.	Name of the ULB	Dates of Social Audit conducted	No. of Beneficiaries/ Potential Beneficiaries Interviewed	No. of FGDs conducted	Date of Public Hearing	Presiding Officer
1	Greater Vishakhapatnam Municipal Corporation	25-09-2018 to 06-10-2018	513	8	06-10-2018	PD, UCD, GVMC
2	Rajahmundry Municipal Corporation	24-10-2018 To 30-10-2018	368	4	30-10-2018	Addl. Commissioner, Rajamahendravaram Municipal Corporation

Contd...

S. No.	Name of the ULB	Dates of Social Audit conducted	No. of Beneficiaries/ Potential Beneficiaries Interviewed	No. of FGDs conducted	Date of Public Hearing	Presiding Officer
3	Guntur Municipal Corporation	31-10-2018 To 06.11.2018	521	6	06.11.2018	Addl. Commissioner-Housing, Guntur Municipal Corporation
4	Dharmavaram Municipality	14-11-2018 To 20-11-2018	279	2	20-11-2018	Commissioner, Dharmavaram Municipality
5	Kurnool Municipal Corporation	22-11-2018 To 28-11-2018	400	6	28-11-2018	Commissioner, Kurnool Municipal Corporation
6	Nellore Municipal Corporation	19-10-2018 To 29-10-2018	348	2	29-10-2018	Addl. Commissioner Nellore Municipal Corporation
7	Gudivada Municipality	03-11-2018 T0 09-11-2018	278	2	09-11-2018	Commissioner, Gudivada Municipality
8	Bheemavaram Municipality	10-11-2018 To 16-11-2018	204	2	16-11-2018	Commissioner, Bheemavaram Municipality
9	Vijayanagaram Municipality	25-11-2018 To 01-12-2018	167	2	01-12-2018	Commissioner, Vijayanagaram Municipality

General Issues emerged in Social Audit are detailed below

⇒ Inclusion of needy -Many eligible persons could not get sanction in both verticals

⇒ Exclusion errors

⇒ Low awareness levels

⇒ Poor grievance redressal systems

⇒ Participation of the people, CSOs was not taken into consideration at any stage

⇒ Delay in payments for BLC houses

⇒ Delay in allotment of AHP houses

⇒ No information on application or sanction status

⇒ No information to AHP beneficiaries regarding bank loans and EMIs

⇒ Financial burden on beneficiaries to open new account for bank loan

⇒ In both AHP and BLC verticals- local leaders/ officials demanding money

⇒ Shear wall technology is costly

Best practices observed are as follows

⇒ Display of applicants list in wards for verification (RJY ULB)

⇒ Sanction of AHP houses through lottery in Public at ward level (RJY ULB)

⇒ Allotment of houses through lottery/NAC App

⇒ Arrangements made for beneficiaries to visit site/model house (KNL/Nellore/ Visakhapatnam ULB)

⇒ Quality of construction and provision of external facilities (in all ULBs)

Few Photos

Public hearing at Visakhapatnam

Public hearing at Guntur

GIS-BASED RESOURCE MAPPING FOR FISHERIES DEVELOPMENT IN EAST SIANG DISTRICT, ARUNACHAL PRADESH

Dr. A. Simhachalam

Introduction

The study is basically to create geo-database of resources for fisheries development in East Siang district, Arunachal Pradesh. This consultancy project was sponsored by Director of Fisheries, Government of Arunachal Pradesh, Itanagar. A systematic database for all fish production resources will play a major role in decision-making support for enhanced production of fishes and support immensely in the maintenance of ecological balance between flora and fauna. Hence, it is necessary to develop a scientific database comprising full inventory of the water resources/bodies. Generation of such a database provides scientific basis of making comprehensive plan for sustainable management of these water resources as well as in achieving sustained fish production.

The present study is related to mapping of land use-land cover, waterbodies, settlement as well as the connected roads for the growth and development of fisheries of the study area. High resolution satellite imagery and DEM is used to identify the waterbodies which are further classified into beels, ponds, river and stream along with the water availability status and area statistics. The study also includes field survey to collect the information about total number of existing ponds practicing Pisciculture and non-Pisciculture till date with location, elevation, ownership status, etc., and a list for the persons who are willing to construct new fish ponds to establish their own livelihood/business.

A Geographic Information System (GIS) is a system designed to capture, store, manipulate, analyse, manage, and present spatial or geographic data. GIS with combination of different advanced tools and models can improvise the spatial monitoring, data visualisation, mapping of resources as well as helpful for the planning and management for future development.

Objectives

The present study is aimed to be carried out with following objectives:

1. Mapping of water resources of different categories like domestic ponds, beels, marshy, swamps, lakes, rivers, streams, etc., using geo-spatial technologies.
2. To Classify the Water Resources under
    a. Pisciculture and Non-Pisciculture practices
    b. Ownership status
    c. Seasonal and perennial
3. To Generate Geo-database of LULC and Statistical areas in Digital Map
4. To Prepare Report along with Maps and Statistical Tables for Planning of Pisciculture.

Methodology

To fulfil the present work both primary and secondary data are used.

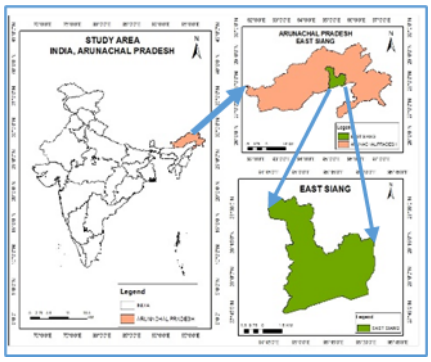
Primary Data used are Field data: GPS Survey, socio-economic data collected through Interviews, discussion, schedule and observations methods, GPS, mobile phone.

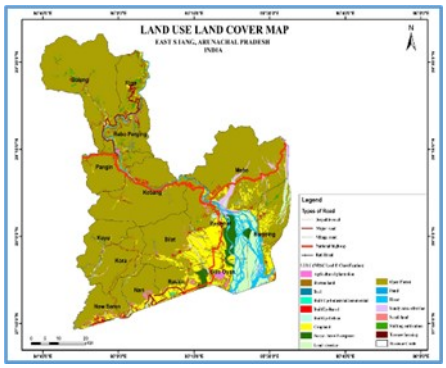
Secondary Data includes Satellite Imagery such as Resource sat 2: LISS-IV and ASTER GDEM and which is used to prepare land use land cover map by manual digitisation from satellite imagery, verified by Google Earth and Drainage maps were extracted from ASTER GLOBAL DIGITAL MODEL. Toposheets collected from Survey of India (SOI) were used to prepare the base map which included roads, river, and settlement. The observation, interview and schedule methods along with the GPS survey were used for primary data collection for the present study. Location of ponds are collected through GPS survey by practical visit to the study area and person-to-person interaction to substantiate the objectives of the study by the field assistant. To obtain the secondary data toposheets, satellite imagery, Google Earth, various articles, books, journals, web browsing are used as sources.

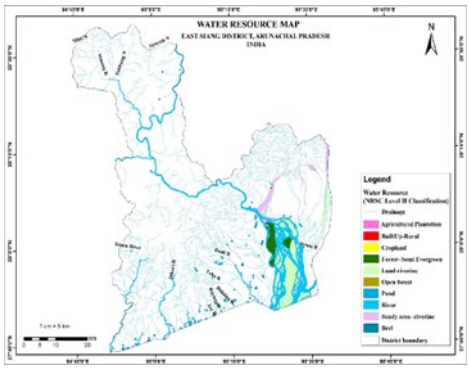
After completion of the field data collection through GPS survey, the secondary data was processed on GIS environment using geospatial technologies. The satellite imageries and toposheets were mosaicked and subset according to the area of interest using Erdas Imagine 2014 software. A settlement layer was created using the Toposheets in association with the roads and river. Different thematic layers, i.e., LULC, roads, waterbodies, rivers were created from LISS IV imageries by using digitisation method and the drainage layer was extracted from the DEM using interpolation method. After creation of all thematic layers, topology was applied to assess the quality of the layers and verify with Google Earth. The points collected through GPS survey were entered in MS Excel and exported into shapefile using ArcGIS software for further editing. All layers were finalised by creating the attributes with area statistics for further interpretation, analysis and map compositions.

Study Area

East Siang district of Arunachal Pradesh was proposed as study area for the present work. The location of East Siang district lies between 27.7166 to 29.3333 North Latitudes and 94.7000 to 95.5833 East Longitudes. The study area consists of 15 numbers of revenue circles, namely Pangin, Mebo, Boleng, Riga, Ribo-Perging, Kebang, Koyu, Kora, Newseren, Nari, Ruskin, Bilat, Sille-Oyan, Pasighat, Namsing. The main river is Siang. The East Siang district is a wild, mountainous region and presents a remarkable topographic variety. The varied topography of the district has a profound influence on the climatic conditions of the district. The climate varies from place to place depending on the elevation and its location. The areas having altitude between 100 – 1500 m are predominated with humid subtropical climate and the areas with high and very high altitude areas (3500 – 5500 m) have a subtropical highland climate and alpine climate.







Findings

Water resource layer is the primary consideration to fulfil the objectives of the project. To get an overview of the topography, land use and land cover of the East Siang district, Lulc map was generated. All the maps and the attributes that includes area in ha, name, type of land use, type of water resources along with all other required information were stored in a geospatial database using ArcGIS software.

A digital elevation model of the East Siang district has been used to extract drainage. Hilly topography and slope of the district give rise to numerous small streams or sub-streams in the area. According to NRSC Level II classification, the water resource are classified into four categories as pond, river, beels, and stream/drainage which has fulfilled one of the objectives of the study.

The entire drainage system is a part of Brahmaputra Basin and the Siang River is the main tributary of the mighty Brahmaputra. Simang, Simen, Seram, Subbung, Ruskin are some important tributaries of the East Siang district which are shown in the River and Drainage map, The associated land use land cover classes with the water resource such as land-riverine, sandy area-riverine, forest, agricultural land are shown in thee map above. Water resource map-based water availability, present practice and ownerships have been prepared to achieve the purpose of the study that helps to analyse the resource for future growth & planning.

In total, 259 ponds and 16 beels have been identified, of which 28 ponds and four beels are non-perennial. As per the field data received from the department concerned, 98 per cent of ponds are perennial. But after verifying from the Google Earth by visualising the historical imageries and comparing with satellite imagery, 11 per cent out of the total pond were classified as non-perennial. Using the field survey data, the locations of 97 ponds were obtained while other locations were extracted from satellite imagery. The present practice for the area is pisciculture as the most of the ponds are used for fish farming practice. A limited number of ponds are categorised as non-pisciculture when compare them with their associated land use land cover classes and size. Each pond and beel are verified using the Google Earth historical imageries. Ponds belonging to local people as per the field investigation indicate the status of ownerships of ponds as private.

Summarised details of Land use land cover classes are provided below:

S. No.	Number of polygons	Classification	Level II	Area in Sq.m	Area in Ha
1	242	Agricultural land	Agricultural plantation	29653471.57	2965.35
2	55	Wastelands	Barren land	2383482.34	238.35
3	16	Water bodies	Beel	135775.61	13.58
4	13	Built-up	Built Up-Industrial/ commercial	3522602.62	352.26
5	1083	Built-up	Built-up-Rural	27353409.77	2735.39
6	27	Built-up	Built-up-Urban	9387092.70	938.71
7	1136	Agricultural land	Cropland	332517403.49	33252.05
8	6	Forest	Forest- Semi Evergreen	58592863.78	5859.29
9	242	Wastelands	Land-riverine	154235868.35	15423.59
10	14	Forest	Open Forest	3141612000.1	314161.2
11	259	Water bodies	Pond	255624.84	25.56
12	30	Water bodies	River	124387686.86	12438.77
13	453	Wastelands	Sandy area – riverine	71206010.20	7120.60
14	4	Wastelands	Scrub land	1488034.76	148.80
15	747	Shifting cultivation	Shifting cultivation	39988150.35	3998.82
16	243	Agricultural land	Terrace farming	6472741.76	647.27
Total	**4570**			**4003192219.1**	**400319.59**

Conclusions

- Almost all the ponds in East Siang district identified through Satellite Imagery, Google Earth Imagery as well as field survey are perennial and most of the villagers practice pisciculture which helps in fishery production and development of the district.
- Villagers of East Siang district are willing to open their land for construction of new pond for fish farming as this a major source of livelihood, which also helps in enriching the flora and fauna within the area.
- LULC for all the RC of East Siang district have been prepared using Satellite Imagery, which gives a detailed information about the geography of the study area. Three types of water resource maps have been prepared based on perennial and non-perennial, pisciculture and non-pisciculture, and ownership to serve the core of the project. The study reveals that south-eastern part of East Siang is a high potential zone for fish farming practice.

- The study suggests that ponds can be natural or artificial. But man-made ponds require an easily accessible, tree clad fallow land adjacent to the settlement area. The integrated farming system also can be adopted in paddy field using irrigation techniques. Availability, quality of water should be one of the major concerns for growth and development of fish farming practices
- The geo-database created will help in proper planning and monitoring of the resources.

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USE GEO-INFORMATICS IN RURAL ROADS PROJECT UNDER PMGSY IN THE STATE OF ANDHRA PRADESH, KERALA AND TAMIL NADU

Dr. P. Kesava Rao
Er. H. K. Solanki

Introduction

Implementation of PMGSY scheme poses major challenges. It is very difficult and hard to manage this giant project using traditional methods of project management as these methods are not only tedious and time consuming but also difficult to retrieve the desired information. Use of geoinformatics will help to overcome these difficulties, and also support better planning, decision-making and monitoring of PMGSY scheme.

The spirit and the objective of PMGSY is to provide single all-weather road connectivity to the eligible unconnected rural habitations in the Core Network. The Ministry felt the need for a robust mechanism to detect the variance between the progress of implementation of the scheme and the progress reported manually/electronically by the States, on a real-time basis. Establishing such a mechanism would ensure appropriate and timely corrective action. The satellite imageries spread over different time series were analysed to derive progress related information on PMGSY road construction. The progress reported by the State government on the Online Management Monitoring & Accounting System (OMMAS), the MIS of PMGSY, was cross-verified with the progress of implementation in the construction of PMGSY road, which was actually made on ground with the help of satellite imageries. Based on the proof of concept, the Ministry intends to upscale the project by using the application of space technology. The current project involves the application of Rural Road Projects under the PMGSY, which involves the temporal changes for monitoring roads taken up under PMGSY in Andhra Pradesh, Kerala and Tamil Nadu.

Objectives

The present study is taken up with the following objectives:

- Check the progress reported by the States on the scheme (manual or OMMAS) with respect to
  - ⇒ Reported alignment, i.e., habitations connected
  - ⇒ Reported physical progress of construction
- To facilitate real-time monitoring of PMGSY roads using satellite imagery and bring a comparative statement showing deviations, if any
- To assess the physical progress of the roads using the satellite imageries and field verification (ground truthing)
- To verify whether the road is laid as per approved OMMAS

- To verify whether the road actually connects the targeted habitation/habitations as per approved OMMAS
- Harmonisation and hosting of existing geospatial database on rural roads on to Bhuvan.

Methodology

For the execution of this project, the teams visited the district and collected the list of roads to be taken up for the study. Based on the information given by the State government officials, the alignment of the road was captured. For procuring the satellite data, the GPS coordinates of the roads were taken and based on the year of completion, the pre and post imageries of the road were procured. The image analysis was done based on the images of Cartosat data and other high resolution satellite data. For the analysis, the length of the road was marked from the imagery and the BT and CC portion were distinguished from the imageries based on the reflectance values and visual interpretation. The length of the road under BT and CC portion was calculated from the imageries and compared with the OMMAS data of the respective road. The width of the road was calculated from the imagery using the image processing software and the numbers of culverts constructed were captured from the imagery along with the length.

Study Area: Andhra Pradesh, Tamil Nadu and Kerala

Findings based on Satellite Imagery Analysis

The present study is an attempt for Generating Monitoring Progress Report of existing PMGSY Roads. In this study, we compared Remote Sensed Data (Temporal Imageries) to observe the temporal changes happened before starting and after completing road network and also for Cross Drainage Networks with field Detailed Project Report (DPR). The Temporal Images will help to find the road type and other changes in Pradhan Mantri Gram Sadak Yojna Scheme to analyse the changes for better planning management and development. The satellite data for different years was procured and analysed for the PMGSY Roads. The analysis was done by using Cartosat and other high resolution satellite data.

Conclusions

From the analysis of Kerala, Andhra Pradesh and Tamil Nādu States, it is observed that **3,227** roads are collected from the field out of **3,281** roads, whereas **54** roads data is missing from field survey. The accompanying officials had no information about the existence of the road. Therefore, based on the field survey for the acquired 3227 roads, the roads are not satisfying the criteria of **5 per cent** (in case of Plain terrains)/ **8 per cent** (in case of hilly terrains) threshold (above or below) of the OMMAS mentioned length and it has been reported as **Length variation errors**. Secondly, the habitations mentioned in OMMAS if not found on field survey within 500 metres of the vicinity, then error is reported as

Habitation Error and finally, if the road is mentioned to having completed by the completed year as per OMMAS, but not found even after the completion year, then it is reported as **Pre-Post Image Analysis Error**.

Therefore, all the three States have case-1 and case-2 errors of length variation and habitation errors. About 690 roads in all three States fall under length variation since they do not satisfy the criteria of **<5/8 per cent and > 5/8 per cent** variation in length, 560 roads fall under habitation errors and 276 roads have both length and habitation errors. The table below shows the variation in length of 3227 roads PMGSY roads in Kerala, Andhra Pradesh and Tamil Nadu States.

Table 1: Summary of findings for Kerala, Andhra Pradesh & Tamil Nadu States

S.No.	State	Total No of Roads mentioned in OMMAS	No. of roads Data collected in Field	No of Roads data missing (from Field Analysis)	Errors detected & No. of Reports submitted		
					Length Variation Error	Habitation Error	Length Variation and Habitation Error
1	Andhra Pradesh	1018	998	20	335	92	43
2	Kerala	364	338	26	15	17	1
3	Tamil Nadu	1899	1891	8	340	451	232
Total		**3281**	**3227**	**54**	**690**	**560**	**276**

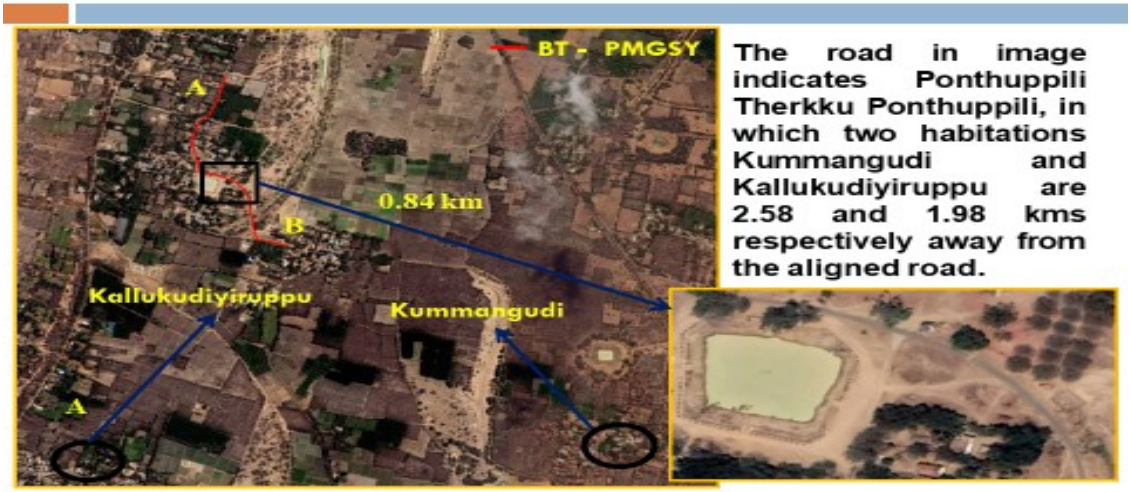
Important Learnings

Geoinformatics is very useful for PMGSY monitoring and the study is carried out for all States and data is hosted on dynamic web portal, Bhuvan-PMGSY, for the MoRD PMGSY Division, States, PIA, field functionaries to access it on real-time basis.

Through these innovative initiatives, the PMGSY road network is captured digitally along with its legacy data, current scenario and change detection for remedial measures and to plan objectively for the future connectivity networks covering all habitations, GPs, etc.

Vattachira-Nirattukunnu Road, Kunnamangulam Block, Kozikode District, Kerala

Gulika puzha - Kovu puram Road, Kunnummal Block, Kozikode District, Kerala



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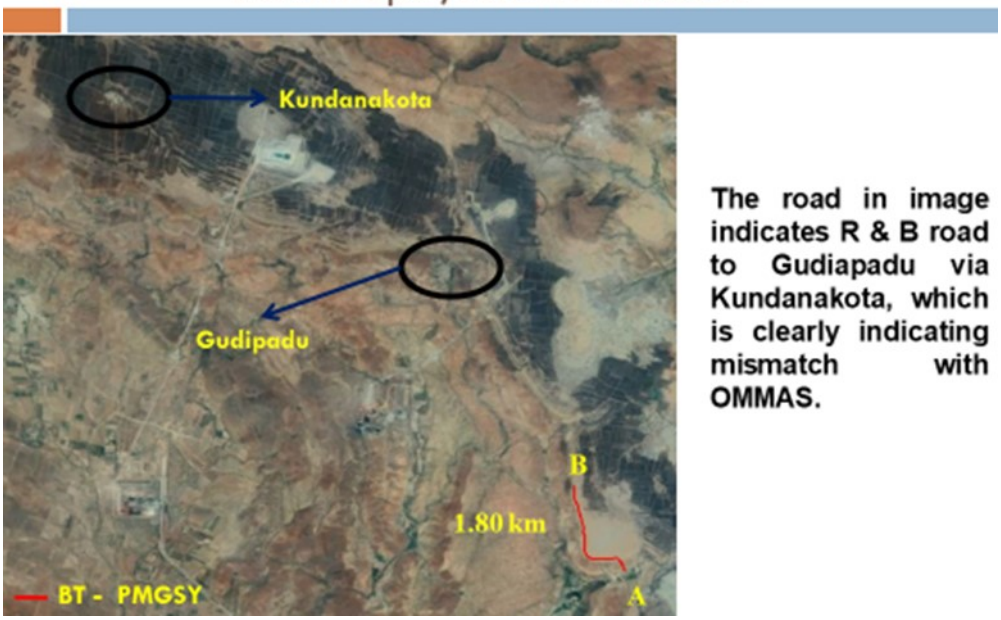
PonthuppiliTherkku Ponthuppili Road, Arimalam Block, Pudukkottai District, Tamil Nadu

R & B Road to Gudipadu
Ananthapur, Andhra Pradesh



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USE OF GEOINFORMATICS FOR MONITORING OF RURAL ROADS UNDER PMGSY IN THE STATES OF TRIPURA, MADHYA PRADESH AND SIKKIM

Dr. N. S. R. Prasad
Dr. M. V. Ravibabu

Introduction

The development of any country depends on the infrastructural facilities available therein. The role of rural roads is very important in a country like India where majority of the population resides in rural areas and the main source of their earning is based on agriculture products. Rural roads provide the access to basic amenities and means of transporting agricultural products to nearest market centres. Pradhan Mantri Gram Sadak Yojna (PMGSY) under the Ministry of Rural Development was conceptualised and launched on 25th December, 2000. The objective was to provide basic access by way of all-weather roads to the all habitations having population '250 or above in desert and tribal areas' and '500 or above for the rest of habitations' by year 2007 in phased manner.

Implementation of PMGSY scheme poses major challenges. It is very difficult and hard to manage this giant project using traditional methods of project management as these methods are not only tedious and time consuming but also difficult to retrieve the desired information. To overcome these difficulties use of Geoinformatics will help in better planning, decision-making and monitoring of PMGSY scheme. The current project involves the Application of Rural Road Projects under the PMGSY which involves the temporal changes for monitoring roads taken up under PMGSY.

Objectives

The present study is taken up with the following objectives:

A. Check the progress reported by the States on Scheme (manual or OMMAS) with respect to
   (a) Reported alignment, i.e., Habitations connected
   (b) Reported physical progress of construction
B. To facilitate real-time monitoring of PMGSY Roads using satellite imagery and bring a comparative statement showing deviations, if any
C. To assess the physical progress of the roads using the satellite imageries and field verification (ground truthing)
D. To verify whether the road is being laid as per approved DPR and approved alignment
E. To verify whether the road actually connects the targeted habitation/habitations as per approved DPR

F. Harmonisation and hosting of existing geospatial database on rural roads available with the ministry on to Bhuvan

G. Take up training and capacity building for the field engineers in all the States of the country through SIRDs, in a cascading manner

H. Undertake field-based Ground Truthing in States concerned of the country

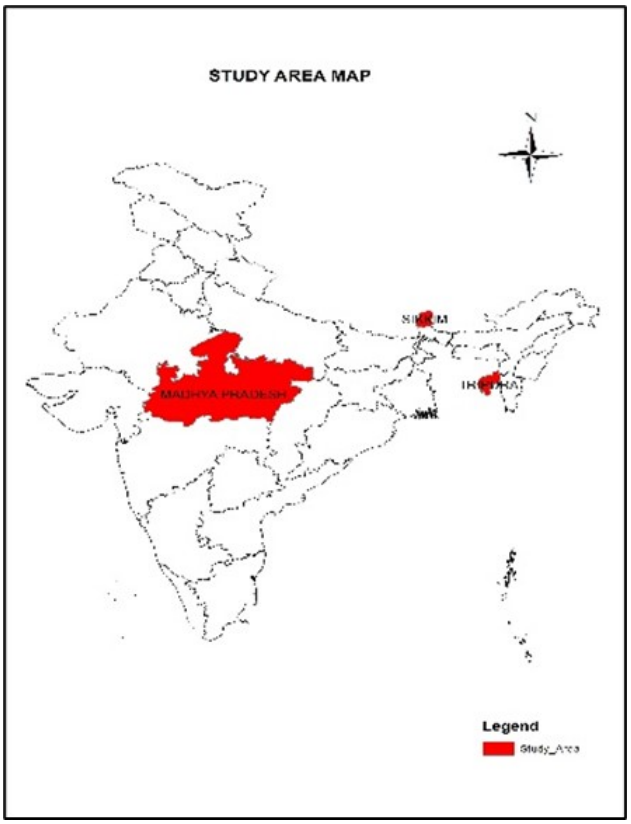
I. Submit sufficient number of detailed report (State-Wise) along with Executive Summary to the Ministry as per the timelines prescribed.

Methodology

For the execution of this project, collected the list of roads to be taken up for the study. Based on the information given by the State government officials, the alignment of the road was captured. For procuring the satellite data, the GPS coordinates of the roads were taken and based on the year of completion the pre and post imageries of the road were procured. The image analysis was done based on the Images of Bing Maps, Cartosat data procured from NRSC and other high resolution satellite data. For the analysis, the length of the road was marked from the imagery and the BT and CC portion were distinguished from the imageries based on the reflectance values and visual interpretation. The length of the road under BT and CC portion was calculated from the imageries and compared with the OMMAS data of the respective road. The width of the road was calculated from the imagery using the image processing software and the numbers of culverts constructed were captured from the imagery along with the length.

Study Area

The study area consisting of all districts in Madhya Pradesh, Sikkim and Tripura States



Findings:

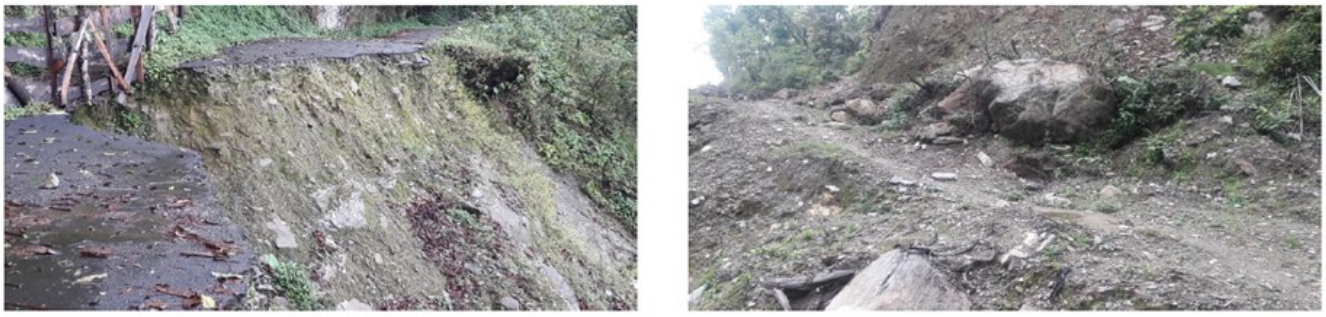
a) In **Sikkim**, four districts are in the study area, and a total of 163 roads were sanctioned under PMGSY. From the analysis, it is observed that **161** roads are collected from field, the roads not satisfying the criteria of **8 per cent (in case of hilly terrains) threshold (above or below)** of the OMMAS mentioned length have been reported as **Length variation errors**. If the road is mentioned to having completed by the completed year as per OMMAS, but not found even after the completion year, then **Pre-Post Image Analysis Error** is being reported.

The table below shows the variation in length of PMGSY roads of Sikkim State.

S. No	District	Total No of Roads mentioned in OMMAS	No. of roads Data collected in Field	No of Roads data missing (from Field Analysis)	Errors detected & No. of Reports submitted	
					Total No of Roads having Length Error	Total No of Roads having Habitation Error
1	East	56	55	1	13	0
2	North	6	6	0	0	0
3	South	59	58	1	3	0
4	West	42	42	0	5	0
SIKKIM STATE		**163**	**161**	**2**	**21**	**0**

Reasons for incomplete field survey:

Case 1: Inaccessible roads (Road Blockages & Land Slide affected roads)



Inaccessible roads due to Land Slide and Road Washouts

Damaged Culverts and Washedout Bridges

b) In Tripura State, eight districts are in the study area, out of which a total of **967** roads were considered for analysis. From the analysis, it is observed that **870** roads are collected from field. Data of 97 roads is missing from field survey. Insufficient field information explanations include three causes based on field analysis, such as Inaccessible roads (Road Blockages & Cyclone effected roads), Roads under construction (Bridges) and officials accompanying have no information about the existence of the road. Therefore, based on the field survey for the acquired **870** roads, the roads not satisfying the criteria of 8 per cent (in case of hilly terrains) threshold (above or below) of the OMMAS mentioned length have been reported as Length variation errors. Secondly, the habitations mentioned in OMMAS if not found on filed survey within 500 metres of the vicinity, then error is considered to be a Habitation Error and therefore reported and finally, if the road is mentioned to having completed by the completed year as per OMMAS, but not found even after the completion year, then Pre-Post Image Analysis Error is being reported.

The table below shows the variation in length of PMGSY roads of Tripura State.

S.No.	District	Total No of Roads mentioned in OMMAS	No. of roads Data collected in Field	No of Roads data missing (from Field Analysis)	Errors detected & No. of Reports submitted	
					Total No. of Roads having Length Error	Total No. of Roads having Habitation Error
1	**Dhalai**	106	96	10	11	0
2	**Gomati**	152	136	16	25	0
3	**Khowai**	111	100	11	9	0
4	**North Tripura**	59	41	18	2	0
5	**Sephahijal**	149	144	5	22	0
6	**South Tripura**	238	207	31	46	0
7	**Unakoti**	46	46	0	6	0
8	**West Tripura**	106	100	6	17	0
Total Roads		**967**	**870**	**97**	**138**	**0**

c) In **Madhya Pradesh**, 51 districts are in the study area, out of which a total of **13,745** roads were considered for analysis. From the analysis, it is observed that **13,704** roads are collected from field. Data of seven roads is missing from field survey due to following reasons. Insufficient field information explanations include three causes based on field analysis. Inaccessible roads (Road Blockages & Cyclone affected roads), Roads under construction (Bridges) and officials accompanying have no information about the existence of the road and rest roads are with Zero OMMAS Length. Therefore, based on the field survey for the acquired **13,704** roads, the roads not satisfying the criteria of 5 per cent (in case of Plain terrains) threshold (above or below) of the OMMAS mentioned length have been reported as Length variation errors. Secondly, the habitations mentioned in OMMAS if not found on filed survey within 500 metres of the

vicinity, then error is considered to be a Habitation Error, and therefore reported and finally, if the road is mentioned to having completed by the completed year as per OMMAS, but not found even after the completion year, then Pre-Post Image Analysis Error is being reported.

The table below shows the variation in length of PMGSY roads of Madhya Pradesh State.

S. No.	District	Total No. of Roads mentioned in OMMAS	No. of roads Data collected in Field	No. of Roads data missing (from Field Analysis)	Errors detected & No. of Reports submitted	
					Total No. of Roads having Length Error	Total No. of Roads having Habitation Error
1	Agar	183	183	0	15	0
2	Alirajpur	223	223	0	10	2
3	Anuppur	193	193	0	3	4
4	Ashok Nagar	233	233	0	0	10
5	Balaghat	370	368	0	4	2
6	Barwani	214	213	0	4	1
7	Betul	497	489	0	11	23
8	Bhind	307	306	0	0	0
9	Bhopal	68	68	0	22	5
10	Burhanpur	58	56	0	0	0
11	Chhatarpur	389	388	0	0	0
12	Chhindwara	654	654	0	13	0
13	Damoh	219	219	0	1	0
14	Datia	172	172	0	4	0
15	Dewas	267	267	0	6	16
16	Dhar	463	458	2	11	14
17	Dindori	331	329	0	8	0
18	Guna	275	275	0	6	0
19	Gwalior	117	117	0	3	0
20	Harda	81	81	0	2	1
21	Hoshangabad	236	235	0	1	0
22	Indore	115	115	0	0	0
23	Jabalpur	245	245	0	18	1
24	Jhabua	309	309	0	9	21
25	Katni	216	215	1	6	0
26	Khandwa	147	146	1	0	0
27	Khargone	262	262	0	0	0
28	Mandla	362	358	0	35	0
29	Mandsour	269	269	0	11	0
30	Morena	310	310	0	5	0
31	Narsinghpur	209	209	0	9	6
32	Neemuch	121	121	0	8	8
33	Panna	218	218	0	9	0
34	Raisen	266	265	0	1	0
35	Rajgarh	373	373	0	23	0

Contd….

S. No.	District	Total No. of Roads mentioned in OMMAS	No. of roads Data collected in Field	No. of Roads data missing (from Field Analysis)	Errors detected & No. of Reports submitted	
					Total No. of Roads having Length Error	Total No. of Roads having Habitation Error
36	Ratlam	283	281	0	27	0
37	Rewa	322	322	0	5	63
38	Sagar	395	393	0	58	0
39	Satna	300	300	0	2	45
40	Sehore	293	293	0	30	0
41	Seoni	591	590	1	10	0
42	Shahdol	275	275	0	10	10
43	Shajapur	199	198	1	19	1
44	Sheopur	126	126	0	13	0
45	Shivpuri	452	449	0	41	0
46	Sidhi	137	136	1	1	0
47	Singrauli	189	189	0	4	0
48	Tikamgarh	301	301	0	4	13
49	Ujjain	379	379	0	7	0
50	Umaria	225	225	0	13	0
51	Vidisha	306	305	0	9	0
	Total	**13745**	**13704**	**7**	**511**	**246**

Conclusion:

Sikkim has only case-1 errors of length variation; nearly 21 roads out of the 163 roads in the entire State fall under length variation error since they do not satisfy the criteria of <8 per cent and >8 per cent variation in length, respectively.

Tripura has only case-1 errors of length variation, about 138 roads out of 967 roads in the entire State fall under length variation error since they do not satisfy the criteria of < 8 per cent and >8 per cent variation in length respectively.

Madhya Pradesh has both case-1 & case-2 errors, about 511 roads out of 13745 roads in the entire State fall under length variation error since they do not satisfy the criteria of <5 per cent and >5 per cent variation in length, respectively, whereas 246 roads are found with habitation errors which does not satisfy criteria of <500m.

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PANCHAYAT SASHAKTIKARAN AWARDED FETRI GRAM PANCHAYAT, MAHARASHTRA: LESSONS TO BE LEARNT

Dr. Pratyusna Patnaik

Introduction

A comprehensive definition of an ideal village or developed village is to make available of urban amenities for rural areas. It has been widely considered that a developed Panchayat addresses the elements of civic facilities through intervention such as agricultural improvement, water and sanitation facilities, road connectivity, access to health and education, gender sensitisation, etc. PRIs in Indian context, which people call as the third government, are key player in providing basic service delivery is labelled as 'hollow governance'. The reason behind slow pace of service delivery is notably argued that political decentralisation alone is likely to have limited benefits, unless accompanied by decentralisation of funds, functions, and functionaries.

Moreover, the crux of success depends on number of supporting conditions that are required to enable decentralisation to deliver the public service which includes political commitment, political mobilisation of the poor, institutionalised participation and accountability mechanisms, the availability of adequate financial resources, and technical and managerial capacity in local governments.

Objectives

The essence of the research is to understand the process of knowledge transformation between the stakeholders and the residents of the Panchayat. The nexus between the elected representatives, political leaders and the common citizens as how the process, the strategic approach and execution have taken place in the Panchayat.

Methodology

In order to gather the inputs from the field an empirical inquiry has been made purely on the basis of qualitative methods. Two sets of respondents were interviewed, i.e., Panchayat functionaries and residents of the Panchayat, through open-ended questions. The residents were selected on the basis of random sampling.

Study Areas

The study was conducted in Fetri Panchayat of Nagpur district, Maharashtra. The Panchayat was awarded Panchayati Sashakti Karan Award in the appraisal year 2017-18.

Findings

For fetching water, residents were struggling hard and had to go far off distance to fetch water. Especially, the women were suffering a lot because of the water scarcity in the Panchayat. Therefore, the common concern of water supply has been often placed before the Panchayat by the ward members and resolutions have been passed in this regard. Further, the Gram Sabha has been used as a platform to deliberate and seek solutions to this issue. At present, Panchayat is providing 40 litres of water to every individual. Every household is connected with water pipe and tap. Water is supplied twice daily, two hours in morning and two hours in evening. A fixed price has been decided by the Panchayat for water usage charge, which is Rs.720 per year. Besides the general supply of water, the Panchayat has installed a Reverse Osmosis (RO) plant for drinking water whose ownership has been given to a SHG.

The effort made by Panchayat in supplying water has made a huge impact on the residents. Increased water supply infrastructure in the GP has led to a regular supply of water for two hours in the morning in the public taps as well as individual household connections. Since more households now have individual water connections, the instances of crowding at public taps have come down. Due to the lesser crowds at the public tap, the surrounding is clean and there is no quarrel among women.

Conclusion

The credit of accelerate drive of the successful service delivery in Fetri Panchayat goes to the theoretical foundation of accountability and social capital. Contextualising the theoretical foundation in the study Panchayat, accountability of elected representatives converted through competitive politics and translated from 'power oriented to service oriented'. For instance, elected representatives state lack of the 3Fs (Functions, Funds, and Functionaries), and they are unable to discharge the constitutionally mandated task of delivering the developmental needs. But mere existence of the 3Fs does not amount to an effective medium for service delivery. So additionally, what requires is a strong sense of accountability, responsibility and transparency which is a pre-requite ethos to reach out the people, in respect to delivery of basic service.

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CASE STUDIES ON STRATEGIES AND PROCESS OF COMPREHENSIVE GRAM PANCHAYAT DEVELOPMENT PLAN (GPDP) – DOCUMENTATION OF CASES OF SUCCESSFUL GPS

Dr. R. Chinnadurai

Introduction

Panchayati Raj Institutions (PRIs) across the country have differential performance based on (a) the devolution of 3Fs (Funds, Functions and Functionaries) (b) their capacity building and (b) the efforts made by PRI leadership as well as by the community. In spite of constraints and limitations, there are many outstanding performers among Panchayats all over the country. To build models and to nurture schools of practice, such Panchayats are identified and encouraged by the MoPR, Government of India by giving 'Best Panchayat Award'. This award is a due recognition to PRIs that perform their role well and as incentive for PRI representatives to improve PRI performance and with the intention of bringing the issue of PRI performance into prominence and focus the attention of policymakers.

The guidelines issued by Ministry of Finance for the release and utilisation of the local bodies grant stipulate that proper plans are to be prepared by the GPs for the basic services within the functions devolved to them as per State laws before incurring expenditure under the FFC award. In the context of the Constitutional mandate, these plans have to be participatory plans involving the community, particularly the Gram Sabha, in the formulation of priorities and projects and will also have to ensure the mandates of social justice and economic development mentioned in Article 243G. The Gram Panchayat Development Plan (GPDP) is to have a clear component addressing vulnerabilities of poor and marginalised people and their livelihood opportunities through an integrated poverty reduction plan that converges with the labour budgeting and projectisation exercises under MGNREGS as well. In this context, this case study made an effort on capturing the successful change that occurs when all components of a Gram Panchayat are aligned, i.e., the vision, skills, incentives, resources, action plan and results in participatory manner.

Objectives

- To document the process followed in preparation of Gram Panchayat Development Plan and strategies for mobilisation of people
- To identify the factors motivated for preparation of realistic GPDP and level of implementation.

Methodology

Case study approach was followed for documentation of the cases. Field observation and personal interaction with the elected representatives, functionaries and people from the

respective Panchayats were adopted for collection of required data regarding preparation and implementation of Gram Panchayat Development Plan (GPDP).

Study Area

The study areas were purposely selected three Gram Panchayats, namely Maniram Phalidhara from South Sikkim district of Sikkim, Digambarpur GP from South 24 Pargana district of West Bengal and Malangi GP of Mysore district of Karnataka.

Findings

In all three Gram Panchayats, the Presidents of the GPs have abundant public support, which encouraged them to work for their community tirelessly and achieved certain scale of development in their respective GPs. Each Panchayat has vision of bringing the Panchayat as self-reliant and bringing sustainable development through various approaches and strategies. They gave priority to participatory planning, consensus decisions and implementation of planned decisions. For the purpose of achieving this vision, the Panchayats made tremendous efforts in preparing and implementing Gram Panchayat Development Plan (GPDP) even before instruction from the government of India but the proper process of preparing GPDP had been adhered by strictly following the guidance of the GPDP manual issued by the MoPR, Government of India. The processes followed for preparation of GPDP are more or less common in all the three Gram Panchayats.

For brief understanding the stages of GPDP preparation adopted are given below:

i. Stages of GPDP

- Awareness Generation on the Need for GPDP
- Capacity Building for GPDP
- Communication on Participatory Process
- Preliminary Discussions about the GPDP
- Conduct of Initial Gram Sabha
- Formation of Planning Team
- Discussion on the Development Experience through Situation Analysis
- Conduct of Household Survey
- Conduct of Participatory Rural Appraisal (PRA)
- Building Vision and Dream of the Gram Panchayat
- Setting of Mission of the GP
- Organisation of Ward Sabha, Mahila Sansad and Bala Sansad
- Preparation of Resource Envelop
- Sources of Own Revenue of the Gram Panchayat

- Preparation of draft Development Plan and presentation in the Gram Sabha for approval
- Preparation of Annual Action Plan Calendar for GP

ii. GPDP lead Development in the Gram Panchayat

The GPs have taken utmost care in implementing the participatory development plan prepared with full support of people along with better coordination with the various stakeholders. The annual action plan prepared were drawn from the Panchayat perspective plan. Since the Panchayats prepared realistic plan, they had positive energy in implementation of projects and schemes without much difficulties. The transparent administration and responsive governance are the outcome of planned development of the Panchayats. The GPDP implementation resulted in success in number of development aspects which are worth to mention. The GPs have implemented a number of diversified activities addressing all aspects of life with the vision for the overall development of the Panchayat. It covers education, economic development, infrastructure development, strengthening of livelihoods, women empowerment, welfare of aged, physically challenged, etc.

Conclusion

According to the 73rd Constitutional Amendment, a Panchayat has to work as an agent of development at the grassroots level, as an independent body working for economic development with social justice. Even though the Government of India has given guidance and direction on the functioning of the local governance, the State governments also have to give adequate financial and functional liberty to the Panchayats without much interference. Out of around 2.5 lakh Gram Panchayats in the country, only sporadic success by the Gram Panchayats are found only in limited States. It is common to find the successful Panchayats named 'Beacon Panchayats' to show as models of development within the Panchayats and it has been appreciated and recognised by various institutions through awards and cash prizes. There is a common line of thread among the successful Panchayats that serves as triggering point to usher the development process. It is similar to find in these Panchayats that charismatic leadership, commitment in functioning, innovative ideas of the Gram Panchayat president paved the road map for the success. Such Panchayats act as the bridge between government and the rural community. This dedicative and thinking process lead commendable change in administration and transparency in Panchayat activities resulted in a positive change from the decades of stagnation.

The transparency, accountability and good governance impacted in implementation of development activities in right time to the needy persons in the Panchayat. The trend of positive change and take-off of development process, and tangible changes in delivery of services by the Panchayat created cordial relationship between the service providers and beneficiaries. It paved the way for developing confidence and belief among the people towards Panchayat governance. The approach of grassroots governance made ownership among the local community towards Gram Panchayat which worked reciprocally and

benefitted mutually. This conducive environment has created a platform for people to come together and discuss their problems for finding amicable solutions. It is the initial effort towards participatory planning process and attainment of success in Mani Ram Phalidhara Gram Panchayat in Sikkim and Digambarpur in West Bengal. Therefore, the Panchayats looking for holistic development, creation of sustainable livelihood and economical self-reliance need strong leadership, people's participation in decision-making, effective planning and open governance, and transparent administration.

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ROLE OF DAY-NRLM'S PRI-CBO PROJECT IN ENHANCING WOMEN'S PARTICIPATION IN GRAM SABHA AND GP'S RESPONSE TO THEIR DEMANDS

Dr. Rajesh Kumar Sinha

Introduction

The availability of adequate and efficient human resources is one of the key determinants of effective functioning of Gram Panchayats (GPs). Constitutional mandate and large number of Central and State Schemes on rural development have increased the workload of GPs tremendously. At the same time, with increased literacy, better information flow and awareness, villagers are asserting more in demanding their rights and entitlements from the Gram Panchayats. With rising demands and inadequate human resources to meet those demands, GPs are under extreme pressure. Although rural development schemes/ programmes have administrative components under which scheme-specific functionaries at the State, District, Block and GP levels are hired on contractual basis, these functionaries do not support the GPs in their regular institutional or governance works.

In recent years, two States, namely Jharkhand in 2016 and Andhra Pradesh in 2019, have taken initiatives to deploy Panchayat Volunteers to assist GPs in disseminating information on various schemes, conducting surveys, mobilising community, monitoring implementation of schemes, etc. In this study, the research team has made an effort to document and assess the deployment of Panchayat Volunteers as additional human resources support to GPs in Jharkhand. The research team visited eight GPs of two districts, namely Gumla and Deoghar, and interviewed all key stakeholders – Panchayat Secretaries, Mukhias (President) of GP, Panchayat Volunteers, villagers, district and block officials to get an overall understanding of the process of deployment and functioning of Panchayat Volunteers. Based on the findings, the study has recommended ways to strengthen human resources at the GP level and improve functioning of Panchayat Volunteers.

Objectives

Objectives of this study are to assess the role of DAY NRLM's PRI- CBO Project in enhancing:

i. Women's participation in Gram Sabha, and

ii. Addressing demands of Women SHGs/VOs registered in Gram Sabha and through integration of Village/GP Poverty Reduction Plan into approved GPDP.

Methodology

The study has been conducted using mix of qualitative and quantitative research techniques. Independent variables of the study are: (i) orientation of SHGs/VO leaders on Gram Sabha Mobilisation, (ii) preparatory discussions in meetings of SHGs prior to Gram

Sabha meeting, and (iii) Preparation and submission of Poverty Reduction Plan. Dependant variables of the study are: (i) attendance of women in Gram Sabha meetings (ii) Sanctioning by Gram Panchayat of demand registered by SHGs/ VOs in Gram Sabha, and (iii) Integration of (Village/Gram Panchayat) Poverty Reduction Plan (GP2RP) into GPDP and its implementation.

Gram Sabha registers in experiment GPs and control GPs in the last three financial years i.e., from 2016-17 to 2018-19 were studied and FGDs were conducted with two SHGs to understand the pattern of women's attendance in Gram Sabha in these GPs and for comparison. In addition, Gram Sabha registers of experiment and control GPs were also studied to see the sustainability of the project and analyse women's attendance in Gram Sabha. FGDs with SHGs have also been conducted to understand the process and results of the PRI-CBO project. For two States where the project is over, Gram Sabha registers after completion of the project have also been studied to see the sustainability. Poverty Reduction Plans of selected GPs were also analysed. Similarly, GP meeting registers, GPDP and documents related to works/activities undertaken by GP have been studied to assess the action on demands in Gram Sabha and GP2RP to understand the impact of PRI-CBO project on women's participation in Gram Sabha and response of GP to demands articulated in Gram Sabha and through integration of GP2RP into GPDP.

One FGD with VO/SHGs/women in each of the selected GPs has been conducted to understand the quality of participation (voice) and enabling factors and challenges in women's participation in Gram Sabha. Women's participation in Gram Sabha is analysed through two aspects: attendance and voice. While attendance is self-explanatory, voice has been analysed with the help of number of demands registered by women's SHGs/VOs in the Gram Sabha. Source of information of both these aspects of participation is Gram Sabha meeting register and also FGD. From mapping of GP2RP prepared by VO and GPDP, the integration of the demands raised by SHG federation into the institutional plan of GP has been assessed. Response of GP in these demands is assessed by studying action on the registered demands and GP2RP integrated into GPDP.

Study Area

A total of six States have been selected purposively for the study. Out of these, four are first phase States - Assam and Jharkhand where project interventions are still on and Karnataka and Maharashtra where project is over. Two States are third phase States - Tripura, and Mizoram where interventions are in non-part IX hill areas. Selection of these States have ensured inclusion of all three categories of States: (i) where intervention is continuing from beginning, (ii) where interventions are over and sustainability aspect has been studied, and (iii) where interventions are new and are in non-part IX hilly areas with Village Councils.

Major Findings and Recommendations:

- There is positive role of PRI-CBO convergence project in enhancing participation of

women in Gram Sabha meetings, however this role varies across States due to multiple factors like context of Panchayati Raj System, cooperation from Panchayati Raj officials at GP level, coordination between external mentors and District officials, capacity building of LRG and VO members and socio-economic conditions of SHG members.

- There is a positive role in enhancing the women's participation in Gram Sabha meetings in majority of the experimental GPs as compared to control GPs in selected six States. Particularly, in the North-eastern States, the convergence project is having good results.
- It has been found that Gram Sabha registers were not maintained properly in the sample GPs of Mizoram, Maharashtra and Jharkhand States.
- Poor coordination has been found between the GP officials and VOs and LRG members. Out of 12 experimental GPs, the GP Secretaries in eight GPs have not actively taken part in implementation of this project.
- The PRI-CBO project has concentrated on the individual/household entitlements and capacitated SHG members more on availing the MGNREGA job cards, Aadhaar cards, ration cards, old age pension, widow pension, disability pensions, individual household latrine (IHHL) under SBM-G, house under PMAY-G, etc.
- It difficult to get the data pertaining to the demands raised specifically by the women (SHG members) in the meetings of Gram Sabha. Participatory Assessment of Entitlements (PAE) and Entitlement Access Plan (EAP) under PRI-CBO project focused on identifying individual/household demands of SHG members and not on the felt needs for community works.
- Though there is an activity of preparing the Gram Panchayat Poverty Reduction Plan (GP2RP) under the convergence project and submitting it to the GP office, this is not happening in most of the experimental GPs in selected States, except Assam and Tripura. Out of 12 experimental GPs, the VOs and LRG members in seven GPs are not aware of GP2RP.

Following recommendations have been made to strengthen PRI-CBO project's efficacy:

- An inter-departmental coordination mechanism at the State level with Pr. Secretary/ Secretary of Department of Panchayati Raj, Department of Rural Development, Department of Social Welfare and other relevant line departments as members and CEO of SRLM as Member Convener may be created. This inter-departmental committee shall review its implementation and provide direction to the project.
- Similar mechanism can be created at the district level under the leadership of District Collector with District Panchayati Raj Officer, District Development Officer, District Social Welfare Officer, District level officials of other relevant line departments as Members and District Project Manager of SRLM as Member Convener.
- Central advisory as well as manual for PRI-CBO convergence has been issued to States. All States have to adopt it with detailing of roles and responsibilities of different

stakeholders: government officials, elected representatives, CBOs, etc., and with a robust accountability mechanism to ensure performance of assigned roles.

- The context of Panchayati Raj System and CBOs are not similar in all the States. Hence, a pragmatic approach may be designed separately for each State by understanding the socio-economic conditions of women and provisions of State Panchayati Raj Act.
- The coordination between the GP officials and CBOs can be strengthened by forming GPCC, orienting its members and conducting its meetings every quarter.
- More emphasis is on identifying and cultivating local mentors to be given. Active LRG members and VO leaders may be given further training including exposure visits to Kerala to graduate them into local Mentors.
- The selection of LRG members can be made more transparent.
- Special capacity building and sensitisation programmes may be conducted under the PRI-CBO convergence project exclusively for ERs and Secretary of the GP.
- In the GPs where project has got over, orientation and trainings of newly elected ERs and newly posted GP Secretary may be conducted.
- Inter-GP exchange may also be facilitated so that a local support group may emerge for these LRG members and VOs in case of any doubt on how to overcome a particular bottleneck.
- SHG members may sensitise and motivate other adult members of their family to actively participate in Gram Sabha meetings.

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HUMAN RESOURCE SUPPORT TO GRAM PANCHAYATS: CASE STUDY OF GP VOLUNTEERS IN JHARKHAND

Dr. Rajesh Kumar Sinha

Introduction

The availability of adequate and efficient human resources is one of the key determinants of effective functioning of Gram Panchayats (GPs). Constitutional mandate and large number of Central and State Schemes on rural development has increased the workload of GPs tremendously. At the same time, with increased literacy, better information flow and awareness, villagers are asserting more in demanding their rights and entitlements from the Gram Panchayats. With rising demands and inadequate human resources to meet those demands, GPs are under extreme pressure. Although rural development schemes/ programmes have administrative components under which scheme-specific functionaries at the State, District, Block and GP levels are hired on contractual basis, these functionaries do not support the GPs in their regular institutional or governance works.

In recent years, two States, namely Jharkhand in 2016 and Andhra Pradesh in 2019, have taken initiatives to deploy Panchayat Volunteers to assist GPs in disseminating information on various schemes, conducting surveys, mobilising community, monitoring implementation of schemes etc. In this study, the research team has made an effort to document and assess the deployment of Panchayat Volunteers as additional human resources support to GPs in Jharkhand State. The research team visited eight GPs of two districts namely Gumla and Deoghar and interviewed all key stake holders – Panchayat Secretaries, Mukhias (President) of GP, Panchayat Volunteers, villagers, district and block officials to get an overall understanding of the process of deployment and functioning of Panchayat Volunteers. Based on the findings, the study has recommended ways to strengthen human resources at the GP level and improve functioning of Panchayat Volunteers.

Objectives

Jharkhand is the first State in the country which has deployed Panchayat Volunteers at the GP level for assisting GPs in providing public goods and services to villagers. In order to understand the socio-economic and demographic profiles of Panchayat Volunteers, process of their selection, their contribution to the GP in delivering public goods and services to villagers the present research has been conducted. The major objectives of the study are:

1. To document the deployment of GP volunteers as HR support to GPs;
2. To assess functioning of these volunteers and recommend measures to improve their performance.

Methodology

The case study has documented the process of deployment of these volunteers and also studied their performance. Qualitative and quantitative research techniques have been used to collect secondary and primary data for the study. Primary data has been collected with the help of two interview schedules: first one administered to Panchayat Volunteers, and second one administered to GP President (Mukhia)/ GP Secretary (Sachiv). Interview schedule for Panchayat Volunteers (available at Appendix-1) is having questionnaire on their qualifications, capacity building, activities carried out, achievements and challenges faced by them, etc. Their achievements in assisting GP residents in accessing public services and benefits are also assessed with the help of Focused Group Discussions (FGDs) with villagers. Interview schedules have been administered and data collected using Open Data Kit (ODK) collect application in mobile phone.

In addition, interviews with District Panchayat Raj Officers (DPRO) of selected districts have been conducted to understand how this initiative of State government is functioning in terms of providing human resource support to GPs.

Since the objectives of the case study are to document the deployment process of Panchayat Volunteers as HR support to the GPs and to assess their functioning, the GP has been taken as unit of sample. Two districts, namely Gumla (South Chotanagpur Division) and Deoghar (Santhal Pargana Division) from two different Divisions of the State, have been selected for the study. Thereafter, two-stage simple random sampling was done. First, two Blocks per district were selected randomly from the list of all Blocks in these two districts. Then, two GPs from each selected Blocks have been selected from the list of GPs on simple random basis. All the volunteers who are deployed in these GPs have been studied.

Study Area

Two districts, namely Gumla (South Chotanagpur Division) and Deoghar (Santhal Pargana Division) from two different Divisions of the State, have been selected for the study. Two blocks per district were selected randomly from the list of all Blocks in these two districts. Then, two GPs from each selected Blocks have been selected from the list of GPs on simple random basis. These GPs are Harkatta and Jamuniya (Mohanpur block), Sirsa and Pathrol (Karon block) from Deoghar district and Nawagarh and Kepur (Raidih block), Chharda and Bondo (Sisai block) from Gumla district. All the volunteers who are deployed in these GPs have been studied.

Major Findings and Recommendations

- It was observed that nearly 40 per cent of total sanctioned posts of GP Secretary are vacant in Jharkhand. As a result, most of the GP Secretaries are having charge of more than one GP. In Sample 08 GPs, all GP Secretaries have charge of one more GP.
- The deployment of four Panchayat Volunteers in every GP has provided much needed support to GPs in identifying beneficiaries of schemes, disseminating the information, creating awareness among villagers, monitoring progress of schemes, etc.

- One-fourth of Panchayat Volunteers have become inactive now. Out of total 31 Panchayat Volunteers the research team has been able to meet only 23 as others are not active any more.
- Among eight sample GPs, only two GPs namely Harakatta and Sirsa are having all the four Panchayat Volunteers who are working actively.
- Of the total volunteers interviewed, 74 per cent of Panchayat Volunteers are male and 26 per cent are female.
- Majority of the Panchayat Volunteers in the sample GPs i.e., about 57 per cent are in the age group of 26-30 years and 43 per cent were in the age group of 31-35 years.
- Nearly 48 per cent of them belong to Other Backward Caste (OBC), 22 per cent of Panchayat Volunteers are from Scheduled Tribe (ST) community.
- Approximately, 70 per cent of them have completed their graduation, 22 per cent post-graduates and the remaining 9 per cent of the Panchayat Volunteers have completed intermediate level education.
- Panchayat Volunteers in the sample GPs have not received any formal training since their appointment in the year 2016 except in one Block where they have received half-day orientation.
- Panchayat Volunteers are not receiving their remuneration on time and are not satisfied with their remuneration.
- Nearly 57 per cent of Panchayat Volunteers have worked between 16 to 20 days and 30 per cent of Panchayat Volunteers have worked more than 20 days during December 2019. Only 13 per cent of them have worked for less than 15 days in that month. However, they work for only few hours in a day.
- Panchayat Volunteers are getting cooperation from Mukhias, GP Secretary and villagers and have good rapport with all the GP members, staff and villagers.
- Mukhias, GP Secretary, district and block administration are satisfied with the work performed by Panchayat Volunteers and feel that these Volunteers have helped GP in implementation of schemes, especially completion of PMAY-G houses and dissemination of information about Gram Sabha meetings.
- GPs need to be strengthened by filling up vacancies in the post of GP Secretaries and providing additional human resources.
- Inactive Panchayat Volunteers may be replaced with new Volunteers.
- Panchayat Volunteers may be provided adequate training followed by periodic refresher trainings.
- Incentives of Panchayat Volunteers be adequate and paid in time to motivate them and keep their morale high.
- There may be a robust mechanism to monitor functioning of Panchayat Volunteers and proving then regular feedback.

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IMPACT ASSESSMENT STUDY ON SUPPLY, INSTALLATION AND COMMISSIONING OF SOLAR STREET LIGHTS IN UTTAR PRADESH – A CSR INITIATIVE OF NLC INDIA LIMITED

Dr. R. Murugesan

Introduction

The National Solar Mission was first launched in India on 11th January, 2010 with the determined target of deploying 20,000 MW of grid connected solar power by 2022 and aimed at reducing the cost of solar power generation in the country. For achieving this target, the Government of India has realised that it is cheaper to build and operate solar farms than to run existing coal-fired power plants. When the mission started, the country's installed solar capacity was 10MW, this stood at 6000MW in 2016 and on March 2019 installed capacity rose to 30 GW accounting for enormous increase within short duration. The Neyveli Lignite Corporation (NLC) India Limited, a giant in the fossil fuel mining sector and thermal power generation, alone contributed with overall increased solar power generation capacity of 1350 MW. The NLC India Limited has approached the Centre for Corporate Social Responsibility at National Institute of Rural Development and Panchayati Raj (NIRDPR) to conduct an Impact Assessment Study on the supply, installation and commissioning of Solar Street Lights in these three constituencies. Accordingly, the Study has been conducted.

Objectives

The main objectives of this impact assessment study are as follows:

1. To assess the effectiveness of complete range of solar lighting initiatives taken up under Corporate Social Responsibility of NLCIL in the study area.
2. To analyse effective participation of the users community, officials, PRI representatives from local body on the maintenance of solar lights provided under the CSR initiative.
3. To observe the status of utilisation of target beneficiaries in the field.
4. To examine the overall direct and indirect benefits attained by the stakeholders.

Methodology

For this study, a specific and simple technique was used to identify, select, process and analyse information about the solar street lights provided under different renewable energy programmes implemented under CSR initiatives as this is a growing and important part of an organisation's overall strategy. Precision in research procedure and design of methodology are important aspects for any study. In principle, this study was conducted with an aim of assessing the maintenance and usage of the solar street lights commissioned in three legislative constituencies, viz. Mungra Badshapur, Fatehpur and Phephana in Uttar Pradesh State. For every activity conducted and as a part of data collection process, detailed

information was collected through Focus Group Discussions (FGDs) and stakeholder interviews in order to develop an understanding about the process, objectives, norms, problems and resources at ground level. Discussion meetings with field level functionaries on maintenance of solar systems, resource utilisation and problems of maintaining the NLCILs solar lighting systems were also organised at every sampled project village. Accordingly, the study was conducted holistically by using quantitative as well as qualitative methods of social science research.

Study Area & Sample

- Phephna, Mugra Badshapur and Fatehpur Constituencies in Uttar Pradesh State.
- The sample of 60 units (20 per cent) of 7watt SSLs and 20 units of 18watt HMSL systems were covered in the study area.

Findings & Suggestions:

- Every project and its management traits certify what is being delivered must correct, and whether will deliver real value against the betterment opportunity etc. During the field visit, the study team could realise the need and necessity of the solar lighting systems in these three constituencies due to scarcity of grid connected power systems in their vicinity. This is distinctively confirmed by all the stakeholder and endorsed the relevance of this SSL projects in the sample area.
- There are many types of solar photovoltaic street light designs available in the market at variable prices. To achieve the goal of implementing 300, 7 watt stand-alone street lights in the three assembly constitutions of Mungra Badshapur, Phephana and Fatehpur in Uttar Pradesh, the Energy Efficiency Services Limited (EESL) has assigned the task to M/s. EON Electronics private Ltd., through open bidding system.
- The EESL has got allotted the tender for installing and commissioning of 18watt High Mast Solar Street Lights at 94 locations in these three assembly constituencies to Gawtam Solar Pvt. Ltd., (GSPL).
- The 18w High Mast Solar street lights initiative is very good and it’s showing its high impact on the community benefit and development. Due to this initiative the social and economic conditions of the particular community have increased. Safety and security also increased to all especially for women. This initiative fulfils the needs of the community at its best.
- This 7w and 18w solar street lights initiative is showing a positive impact on environment, by eco-friendly, non-pollutant, using renewable and sustainable energy methods. The 7w solar street light initiative satisfied majority of the individuals. This initiative was done in scattered manner not in a particular place, so the impact is very less to community; however, this initiative gave some extent of benefit to beneficiaries at those backward areas.

- Solar LED Street lighting provides a high quality, sustainable lighting solution for people in remote areas who don't have access to the conventional electricity. NLCIL's CSR initiatives gives special focus on creating the access to lighting systems to the rural poor and distanced people. The success of accessing the electricity through solar photovoltaic systems to all the remote dwellers is found and these were certainly certified by the satisfaction of rural masses in these three constituencies of Uttar Pradesh.
- The solar electrification creates larger social and economic impact on the public particularly improving overall health in rural areas. Because of lack of electricity, livelihoods of people suffer. They undertake agriculture, small businesses and daily survival without the availability of modern-day technology. This particular project also created best impression among the public through NLCIL's CSR initiatives.
- NLCIL through its CSR initiatives took it as a challenge of connecting the unconnected public with solar street lights and high mast solar lights in the sample area where the villages and habitations are not even having the possibility of getting access to grid connections. Of all, the NLCIL's innovative approach of SSLs removes darkness and illuminates every targeted village in the country.
- NLCIL's solar street lighting project become beneficial to the needy public by allowing villagers to move freely from one place to another, without any fear at night and the same is observed during the field study in Uttar Pradesh.
- This project has validated with NLCIL's one among the slogan that 'Women safety has to be our priority.' Solar Street lighting project brought lights on the faces of women from all walks of life, in the areas like streets, public places and markets/sandys in the project villages.
- Majority of people living in villages have now understood the importance of education and know that it is the only way to get rid of poverty. With the support of corporates like NLCIL to ensure effective solar lighting policies which deal with remote villages are sharply intervened and improve the reading behaviour of children by sitting under the solar street lights in the villages. This was clearly witnessed in many of the sample habitations of Uttar Pradesh.
- During harvest season, all cultivated crop/agri products harvested from the field could not be accommodated by the farmers at their residences but may kept at harvest grounds or public roads in their vicinity. This solar street lighting systems directly support the farmers to keep their products safely with help of lighting systems. Similarly, the farmers also could safely place their cattle without any fear and the peasants also felt happy over the initiative of lighting systems provided by NLCIL in these sample villages.
- Elderly care emphasises the social and 41 personal requirements of senior citizens who need some assistance with daily activities and health care, but desire to age with dignity and liberal for their daily activities like gossiping with the fellow seniors, social entertainment with kids and in general, relaxing after sun set or dinner.

- Due to lack of power grid connections in the sample area, this solar street light project has received high appreciation based on its impacts among the public. Hence, these projects may be extended to other parts of the country where similar conditions prevail which will eradicate darkness, improve socio-economic conditions of the rural masses.
- Based on the field experiences, it is suggested that sufficient number of 7w solar lights may be supplied to illuminate the remote villages by identifying the needs and specific locations. The approach of the project should be more beneficial to the community without affecting the environment.
- Need based assessment of Solar Street lights to be conducted in collaboration with Gram Sabhas and public support so as to identify proper locations before installation of such projects. Women representatives must be ensured while identification of project locations.
- While assigning responsibility of care and maintenance, it is suggested that due care must be taken and the women headed households be preferred in remote settlements.
- At the end, the governments are implementing solar mission programme to provide solar street lights to the rural areas, but are not meeting the needs of all the communities in the village. Due to cost factor the State government also distributes very few lights to the total villages and installed at inappropriate places. The corporate companies like NLCIL must involve with large scale investments to lead the solar mission as successive one.

Conclusion:

In order to fulfil the mission of 'Solar India', promotion of other off-grid solar applications would also be encouraged and for rapid scale up, this project is being introduced in cooperation with EESL, a joint venture company of Government of India. The NLCIL's active engagement on supply, installation and commissioning of Solar Street Lights and High Mast Solar Street Lights under Corporate Social Responsibility initiatives ripen the fruits of benefit to the people living in the forests and remote areas. Having taken this as challenge in inaccessible habitations in three Assembly constituencies of Uttar Pradesh, the NLCIL's CSR team must be appreciated for doing this 'Commendable Job' in removing the darkness among the villages.

Overall, installation and commissioning of both 18w High mast Solar Street Lights and 7w Solar Street Lights projects have been rated as EXCELLENT and suggested that the scheme must be replicated to other areas so as to reach the community as a whole. Further, a long-term energy strategy for the company must include the objective of increasing the use of renewable energy at every household's level as well as the criteria for determined decisions on energy investments that yield expectations to the country.

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SOCIAL WATER RISK ASSESSMENT STUDY FOR HINDUSTAN COCA-COLA BEVERAGES PVT. LTD., IN CHITTOOR AND NELLORE DISTRICTS OF ANDHRA PRADESH

Dr. R. Murugesan

Introduction

Social risk assessment is a tool for the systematic analysis of social impact faced by the community, based on the effects of projects. In fact, social risk assessment will study the social issue or problems, to understand the reflections of the stakeholders on the particular activity or project in their locality which may either affect the community or impact on their existence. In general, social impact is about how organisations, businesses' or individuals' actions affect the surrounding community. The Hindustan Coca-Cola Beverages Private Limited (HCCB) is incorporated as private limited company since 14th February, 1997 and now it is grown with authorised capital of Rs.3,05,000.00 lakh and has 44.32 per cent paid-up capital which is Rs. 1,35,182.87 lakh as per financial statement updated on 31st March, 2017 by the Ministry of Corporate Affairs, Government of India.

At first, this company was registered in Delhi and spread across the nation for its business expansions of producing world-famous soft drinks, with different product names under the brand of 'Coca Cola'. The company has installed 50 production plants across two Social Water Risk Assessment Study areas in the country, in Andhra Pradesh, HCCB is operating with one production unit near Srikalahasti in Chittoor district. The company also procured a land parcel in the IFFCO Kisan SEZ at Nellore district for its business prospects. The company is envisioning to increase the production capacity and sale of beverage products through two possible means as given below:

a) To expand the existing Srikalahasti plant using pipeline water supply from Telugu Ganga canal and/or

b) To set-up a new production unit at IFFCO Kisan SEZ in Nellore district.

Keeping these visions in mind, the company decides to conduct the Social Risk Assessment study, so as to understand the field reflections whether positive or negative for the expected enlargement of its business.

Objectives:

1. To observe the effective contributions of available natural resources in the vicinity and its usage for the company

2. To study the role and perceptions of community, officials, PRI representatives on the prospects of HCCB from the selected villages
3. To understand the public apprehension and analyse social risks on the expansion of HCCB activities, and
4. To prepare and develop a road map for impacting interventions and set mile- stone for improvement through suggestions.

Methodology

- Understanding the Project(s): To understand the project design and area of operations, the study team has convened a formal discussion with the major players viz., PRI leaders, Women Self-Help Group Members, Youth Clubs, elders and other stakeholders in the sample villages.
- Focus Group Discussions (FGDs): The study team also arranged consultations with key partners/stakeholders including the field level officials of HCCB, area and field employees/supervisors, beneficiaries of CSR initiatives and local communities in the project area, etc., to find out their involvement, role and responsibilities in this project.
- Interviews: The study team has convened one-to-one interviews and group interactions with the majority of beneficiaries in the project area and local government officials on these initiatives of HCCB.
- Data Collection: By performing site visits to the selected sample villages, required qualitative and quantitative data have been collected.
- Reporting: The primary data and secondary information collected from the field were organised and compiled in the report.

Study Area

I. **11 Village Panchayats of Srikalahasti plant area such as** Challapalem, Kapugunneri, Thondamanpuram, Cherlopalli, Thondamanadu, Subba Nayudu Kandriga, Bokkasampalem, Kodandaramapuram, Ammapalem, Pullareddy Kandriga, Rachagunneri

II. **9 Habitations in the proposed pipeline such as**: Aravakotturu, Kagithala, AM Putturu, Panagal, Mittakandriga, Chinnasingamala, Peddakanali, Basavaipalem, Gnanammakandriga

III. **13 Village Panchayats in Nellore IFFCO SEZ area for the Water Risk Assessment study such as**: Regadichelaka, Bodduvaripalem, Kammapalem, Talamanchi, Basavipalem, Kodavaluru, North Rajupalem, Alurupadu, Dagadarthi, Thadakaluru, Chowtaputhedu, Uchaguntapalem, North Amaluru

Findings & Suggestions

- HCCB is wholly a water dependent company that makes variety of beverage products using the water from available sources and selling it for human consumption. The company was started in 1950 but operationalised during 1993 and maintaining a strong presence with 57 factories by using more than 95 per cent of locally available raw materials in India. The company claims that it provides employment to over 25,000 persons directly and over 2 lakh persons indirectly. Further, it claims to be supporting sustainable development and inclusive growth by focusing on issues relating to water, environment, healthy living, women empowerment, sanitation and social development and supporting environmental causes in rural and semi-urban areas across India.
- During the course of journey, the company has launched many initiatives as part of their endeavour to save the global environment and committed towards sustainable sourcing. HCCB provides growth opportunities to farmers for enhancing fruit cultivation through launch of 'Project Unnati' programme in Uttarakhand and Himachal Pradesh.
- Considering the water is a critical resource for their business sustainability, the company is continuously working towards water conservation as part of their Water Stewardship programme. For which, the HCCB Company has achieved an improvement of 30 per cent in Water Usage Ratio (WUR) in 2018, through various initiatives undertaken by their bottling partners. Further, HCCB has created water replenishment potential equivalent to 124.5 per cent of water used by their operations through 'Anandana' programme and scaling up its approach. The Hindustan Coca-Cola Beverages Private Limited established its manufacturing unit in Kapugunneri village, at Srikalahasti mandal of Chittoor district near Tirupati in Andhra Pradesh State and is operating it since 2011. Though the company is set up in rural areas, it has made a name for itself in the list of top suppliers of beverages in India within pre-set time limit. Identifying an ideal location for any plant is very crucial but that should always maximise the net advantage as well as minimise the unit cost of production and distribution. HCCB has chosen a right place for its manufacturing unit for producing branded beverages and to market it elsewhere. For this purpose, the company has identified the Kapugunneri village near Srikalahasthi that provides required access to water, labour, power, raw material, road and transport facilities, marketing network and disposal of wastages, etc., so that HCCB can fulfil the objectives smoothly in the long run.
- Water is one of the vital elements needed in the day-to-day activities as a living being and essential to the industries, especially beverage making companies like HCCB. In the study area, both surface and groundwater sources were found. It was observed from the field that rainwater, rivers, lakes, and ponds were found as natural sources of water whereas dams, check-dams, canals, wells, tube wells, hand pumps, over-head tanks and pipe-lines etc., were found as man-made sources of water in the study region.
- It is observed from the field that though groundwater is accessible in most of the villages, depth of the water table varies depending on the area, meteorological factors, and rate of exploitation of factories in the region. The quantity and quality of

groundwater also changes with the season. As groundwater is the only source for the people residing in these study villages, their dependency must be protected for the purposes like drinking, household use and agriculture purposes. Hence, the HCCB may extend the possibilities of providing safe drinking water facilities in all the villages. Groundwater is being contaminated with reactive substances, that may result in harmful chemical reactions that destroy the soil around the sample area. Hence, the company must take appropriate steps to prevent water contamination and create a Rapid Action Force (RAF) in anticipation of emergencies if any.

- During the study, the team has observed that many unemployed youths who are aspiring to work with HCCB. Hence, the company may prefer to induct the locals in the factory, depending upon their level of skill and education which may contribute to reduce unemployment problems in the area. Majority of the respondents in Srikalahasti plant area are accepting its existence, provided the company to reduce the water exploitation and increase employment opportunities to the local community rather than outsiders by providing required skill and training.
- When inquired about the problems and risks related to HCCB activities, 14 per cent of respondents delivered negative opinion/feedback with an assumption that HCCB is using excess water and as a result the groundwater levels are decreasing irrespective of seasons in the villages like Challapalem, Kapuguneri and Cherlopalli. Whereas, 68 per cent of the respondents opined that they are not affected with the HCCB activities, and the rest 18 per cent of the respondents informed that they were ignorant about the problems associated with HCCB as their villages are secluded from the HCCB plant area. However, the HCCB must ensure to use water from other sources like drawing water from Telugu Ganga Canal as proposed.
- The respondents also opined that excess usage of groundwater, consecutively pollutes the soil with silts of heavy metals which are present deep inside ground. In general, groundwater overexploitation results in water depletion and quality degradation, impacts the ecological integrity of water resources and wetlands, results in significant losses of habitat and biodiversity. Thus, it is necessary for companies and societies to recognise that the water resources are finite and vulnerable, and find ways to reconcile the demands of human development with the tolerance of nature. The essential step for making water use sustainable is awareness and knowledge of human impacts on the environment.
- Overall groundwater is an important resource for humanity and now becoming vulnerable. Since the company is located at a distant place from these pipe line villages, the public did not face any major impact either on water exploitation or contamination from the company, but the people in these villages do face drought during summer seasons. Hence, it is suggested to provide potable drinking water to these villages under their CSR initiatives.

Conclusion

Considering the analysis on the factors of climate change, depleting source for water and its contaminations, peoples' perceptions, political upheaval, and overall water security, the study recommends:

- The Company (HCCB-Srikalahasti) may either continue as it is or expand its activity in the premises by using water from Telugu Ganga Canal.
- As far as the proposal of opening new plant at IKSEZ, Nellore is concerned, the company must have to wait until the verdict is received from Hon'ble Court of Law. Meanwhile, the management may also approach those village Panchayats concerned for obtaining permissions through Gram Sabhas.
- Of all, expansion of Srikalahasti plant would be a better option in the present context.

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IMPACT EVALUATION OF FINANCIAL INCLUSION PROGRAMMES OF UPASaC

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Introduction

Access to safe, easy and affordable credit and other financial services is recognised as a precondition for accelerating growth and reducing poverty. In India, the government policy to achieve financial inclusion pushed the share of people with a bank account to 80 per cent; still India is home for 190 million unbanked (Asli Demirguc-Kunt, 2017). Financial inclusion allows people to save for family needs, borrow to support a business, or a cushion against an emergency. Though there has been a significant increase in bank accounts and microfinance in the recent past, there is a lot of scope for further financial inclusion and the resultant socio-economic development in India (Srikanth & Reddy, 2017).

Financial inclusion is an essential process in enabling people to overcome poverty by transforming their production and employment activities (Yunus, 1998; Phillipe & Bolton, 1997; Basu & Srivastava, 2005; Banerjee & Newman, 1993; Burgess & Pande, 2003). The proportion of Indian population below poverty line was 21.92 per cent as per the estimates of Planning Commission for the year 2011 – 12 (MoSPI, 2018). In fact, poverty in hilly regions is higher compared to that in the plains (Institute for Human Development, 2018).

Uttarakhand State, located at the foothills of the Himalayas, is primarily an agri-based economy. Most of the area of the State is under forests and wastelands. Only, 14 per cent of the land is used for cultivation and is rain-fed (Government of Uttarakhand, 2019). So, productivity of the hilly area is low, resulting in widespread poverty. The State has great potential to enhance its cropping intensity thereby increasing its agricultural production and productivity especially in the field of pulses, oilseeds, and organic farming. Further, there is a scope for diversification of agriculture, post-harvest technologies, strengthening of market interventions, and use of farm machinery to make agriculture a more profitable occupation (Government of Uttarakhand, 2013).

In view of the above, the Government of Uttarakhand has been implementing Integrated Livelihood Support Project (ILSP) since 2013, to reduce poverty and enhance incomes of the people, in collaboration with International Fund for Agricultural Development (IFAD), an agency of the United Nations Organisation.

IFAD believes that poverty and hunger are human-made phenomena. The root causes of food insecurity and malnutrition are poverty and inequity as much as shortage of food. IFAD assists rural people to improve their agricultural productivity, strengthen their resilience to absorb shocks, market their products at remunerative prices and increase their incomes,

both on-farm and off - farm. IFAD's policies aim at rural transformation as an integral part of economic modernisation. Its guiding principle is inclusive, sustainable and risk proofed against climate change, benefiting the poorest and the vulnerable groups in the rural population.

Keeping in view of the vision and mission of IFAD, ILSP aims at supporting members of producer groups by providing technology and access to markets to improve food security and livelihoods of the poor in the hilly terrain. ILSP has been implemented in Uttarakhand by three Project Implementing Agencies (PIAs), namely Uttarakhand Gramya Vikas Samiti (UGVS), Project Society Watershed Management Directorate (PS-WMD) and Uttarakhand Parvthiya Ajeevika Sanvardhan Company (UPASaC), providing food security and supporting creation of livelihoods and enhancement of incomes. UPASaC, the third PIA, facilitates livelihood financing for the rural poor in the hilly regions of Uttarakhand.

The main focus areas of UPASaC are imparting training on financial literacy, risk management, and enterprise development apart from facilitating bank linkages, and rural financial services to the poor. UPASaC was formed as a 'Social Venture Capital Company' and got registered under the Indian Companies Act, 1956 on 29th March, 2006. Later it was licensed under Section 25 (Revised Section 8) of the Companies Act, 2013. The company has been promoted by Rural Development Department, the State government of Uttarakhand. UPASaC is operating in all 44 blocks of 11 districts of Uttarakhand State in accordance with the agenda of the ILSP. The study titled 'Impact Evaluation of Financial Inclusion Programmes of UPASaC in Uttaarakhand' funded by UPASaC, assessed the contribution of UPASaC, in generation of income and creation of assets by the members of producer groups in Uttarakhand through its financial inclusion programmes.

Objectives

1. To evaluate the effectiveness of various programmes of UPASaC that are contributing to livelihood financing and suggest improvements thereon in line with the goals of the ILSP.
2. Analysis of bank linkage provided to members of Producer Groups (PGs), and Livelihood Collectives (LCs) through UPASaC.
3. Impact of externalities of institutional credit supplied to members of producer groups, and livelihood collectives through UPASaC in terms of development of enterprises, livelihood opportunities, etc.
4. Assessment of the impact of insurance workshops conducted by UPASaC.
5. Evaluation of financial literacy programmes as part of financial inclusion drive conducted by UPASaC.

Methodology

The study is based on primary as well as secondary data. The study made use of secondary sources of data like National Family Health Survey (NFHS) III and IV and annual reports of ILSP.

Primary data was collected from 11 blocks out of 44 blocks located in 11 districts of Uttarakhand, using stratified multistage random sampling method. Primary data were collected by using schedules/questionnaires and conducting Focus Group Discussions, from all the beneficiary and benefactor groups, consisting of; PG members from credit linked groups, PG members from non-credit linked groups, Office bearers of LCs and Other stakeholders like bankers, officials in the government departments. The total number of respondents to schedules/ questionnaires was 572. Besides, the study documented some successful case studies in respect of the development programmes implemented by UPASaC in Uttarakhand.

Study Area:

All the 44 blocks of 11 districts of Uttarakhand State, where UPASaC is operating in all in accordance with the agenda of the ILSP.

Findings:

- Through UPASaC, the ILSP supported 1,26,730 households, 13,017 PGs and VPGs formed into 233 Livelihood Collectives (LCs)/Federations.
- UPASaC collaborates with RSETIs and various government departments like Animal Husbandry, Agriculture, and Horticulture for conducting training on skill and enterprise development for the members of PGs and LCs. During the three-year period (2017-2019), UPASaC conducted 174 training programmes covering 10,180 participants on various topics such as financial literacy, banking/financial services, insurance claim settlement, skills and enterprise development.
- UPASaC has been instrumental in ensuring bank-linkage for members of PGs across all the 11 districts of Uttarakhand. As of 31st March, 2019 UPASaC facilitated 1,412 Term Loans (TLs) of Rs. 19.89 Crore, 2,136 Cash Credit Limit (CCL) accounts of Rs. 17.31Crore, and 12,656 Kisan Credit Cards (KCCs) of Rs. 60.31Crore from banks to rural households in Uttarakhand. The data from UPASaC suggests that there is a phenomenal growth in number of loan accounts (CCL, TL, and KCC) with banks during the three-year period 2016-17 to 2018-19 which is an indicator of creation of rural livelihoods among the members of the PGs.
- More than 97 per cent of the respondents in credit linked group and around 70 per cent of the respondents in non-credit linked group are satisfied with the bank linkage support facilitated by UPASaC.
- Majority of the respondents in credit linked PGs reported a significant improvement in the basic parameters of their living standards, viz., food, clothing, shelter, health and education.
- Majority of the stakeholders expressed that the financial literacy programmes of UPASaC are appropriate and enabled the PG members to improve the latter’s knowledge, skill, habits and attitude with respect to financial matters.

- On the whole, the development initiatives of UPASaC led to socio-economic development of the community and particularly the women, making them contribute to their household in terms of income and through decision-making related to personal finance.

Conclusion:

There is a need to enhance insurance coverage of members of PGs in Uttarakhand mainly with respect to crop and cattle insurance to protect the livelihoods of the people. The awareness level of PG members on pension and remittances was on the lower side and UPASaC may have to work towards digitisation of transactions and opt for credit scoring of PG members so as to ensure better repayment of loans.

It is noticed from the field study that the coordination of UPASaC with State Agriculture department is fairly good, resulting in diversified crops and agricultural surpluses of PGs. It needs to build similar rapport with other departments as well in order to enhance non-farm livelihoods among the rural households.

Development takes long time, more so in Uttarakhand due to its difficult hilly region. As UPASaC has been instrumental in imparting financial literacy and facilitating rural livelihood financing through banks thereby enhancing incomes of the poor and achieving the last mile in financial inclusion, it would be a good idea to extend support to UPASaC in the years to come.

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CONCURRENT EVALUATION OF THE MONITORING OF THE IMPLEMENTATION OF THE NATIONAL FOOD SECURITY ACT, 2013 IN KARNATAKA

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Introduction

The main objective of the National Food Security Act (NFSA) is providing food and nutrition security to people by providing access to foodgrains at affordable prices. The Act provides for coverage of up to 75 per cent of the rural population and up to 50 per cent of the urban population for receiving subsidised foodgrains under Targeted Public Distribution System (TPDS), thus covering about two-thirds of the population. The eligible persons are entitled to receive 5 kg of foodgrains per person per month at subsidised prices for rice/ wheat/coarse grains. The existing Antyodaya Anna Yojana (AAY) households, which constitute the poorest of the poor, will continue to receive 35 kg of foodgrains per household per month at highly subsidized price. Since enactment of the NFSA, the progress has been monitored by the ministry mainly through official sources like periodic progress reports, regular meetings, field visits, etc. But the information regarding exact implementation of the scheme at ground is lacking. This calls for an institutional mechanism with the required reach and resourcefulness. Hence, concurrent evaluation is a tool to provide a fairly good information of outputs and key outcome indicators on quarterly basis with main objectives of facilitating action for improved quality of implementation/service delivery and to serve the end' beneficiaries with quality services. Therefore, the study entitles 'Concurrent evaluation and monitoring of National Food Security Act 2013 in Karnataka State' was entrusted to National Institute of Rural Development and Panchayati Raj, Hyderabad by the Ministry of Food, Consumer Affairs and Public Distribution, New Delhi for the year 2018-19.

Objective

The main objectives of the concurrent evaluation is to assess the overall progress of implementation of NFSA (2013) in Karnataka State and also measure as well as monitor the change it has brought in, specifically:

At systematic level: Assess and analyse the progress of implementation of various aspects of the NFSA 2013.

At beneficiary level: Evaluate the benefits of NFSA on the target groups to achieve the objectives of the NFSA.

Scope of the Study

The concurrent evaluation was conducted in Karnataka on a quarterly basis. Seventeen districts, namely Ballari, Dakshina Kannada, Mandya, Shivamogga, Bengaluru Rural,

Bengaluru Urban, Chikkaballapur, Tumkur, Bijapur, Bhagalkot, Gadag, Haveri, Chamarajanagar, Chikkamangaluru, Hassan, Kodagu and Mysore were covered. The allocation of total sample in Karnataka was based on the proportion of NSSO agro-climatic regions and population size of the State. The sample is further allocated in rural and urban areas within a State in proportion to the rural/urban NFSA coverage share in the State. A multi-stage sample design was adopted for the concurrent evaluation. Districts/cities/towns, villages/urban wards and households were form the first, second and third stages of sampling, respectively. The list of 2011 Census districts and villages/cities/towns constituted the sampling frame. Within the State, districts were selected randomly in such a way that not more than one district is covered per NSSO regions per quarter. The NSSO region is a group of districts with in a State that are similar in respect of agro-climatic features was randomly selected using the equal probability approach as the first stage sample unit (FSU). Village/ Urban ward (where FPS is located) was from the second stage units (SSU) of the selection from which a sample of households was selected. Five Villages/Urban ward (where FPS is located) from rural/urban areas in each district (based on urban rural distribution of NFSA population in the State were randomly selected. In each village, 15 sample NFSA beneficiary households (i.e., 10 PHH & 5 AAY) were selected using a systematic random sampling method. The evaluation team devoted a minimum of two days per district having a visit of Fair Price Shop, Vigilance Committee, District Godown, DD Office, Vigilance Committees at all levels and beneficiaries.

Findings:

I. Beneficiary selection and ration card management:

- Online mechanism for receiving application for new/duplicate ration cards and workflow -based system is functioned.
- Online services available at block level centres run by department/at last mile point through CSCs/ local private entrepreneurs and even at village GP level.
- It is observed that at present SAKALA cell is opened at Taluka level where the issue of new ration cards/deletion/modification of ration cards are taking place. The average time taken for new ration card/modification is two to three hours.
- There is a provision to acknowledge the application or provide status update to the applicant through SMS.
- It is cross checked that details of Ration Card Management System are correctly reported on NFSA
- More than 90 per cent of the population is aware about the NFSA eligibility criteria (especially income criteria).
- It is reported that almost all the eligible households were covered under NFSA.
- Eldest women (18 years and above) of the household recognised as household head.
- Online system is made available live to ensure inclusion of genuine beneficiaries.

- The beneficiaries are fully aware about ration card eligibility and knowledge of addition and deletion of names in the ration card. For new ration card, addition/deletion the beneficiaries are incurred on an average of Rs. 120 (Rs. 50 per application and Rs. 70 per postage charges).
- It is observed that the steps for Aadhaar-based duplication and validation as well as e-KYC/bio updated ration cards is taking place and nearing to completion.
- 99 per cent of RC level Aadhaar seeding is done. However, mobile number seeding in RC is in progress. Bank account seeding of RC is hardly found.
- It is also observed that a few cases where number of Ration Cards were deleted in the district due to Aadhaar based de-duplication.

II. Access to foodgrain entitlements and FPS automation:

- The State has purchased Rs. 3 per kg from FCI (Central Government) and delivered to the PHH card holders 5 kg per person and 35 kg per card for AAY card holders at free of cost.
- Apart from the above the State government adding another 2 kg (purchased from Open Market Sales Scheme-OMSS) and made available to the BPL card (PHH) holders'. Altogether 7 kg per person are made available to the PHH card holder members at free of cost.
- The State government has incurred more than Rs. 2694.83 per quintal and 1.5 per cent cess while purchase of foodgrains through open market auction from FCI.

III. Fair Price Shop services:

- The beneficiaries were fully aware of commodity/entitlement of foodgrains for their share. There were no complaints regarding under weighment of commodities and over charging.
- The beneficiaries expressed that the duration of functioning of PDS shop and timings is quite satisfactory.
- It is ensured that the opinion of beneficiaries on quality of foodgrains and gain preference is quite satisfied and fully recognised. There are no foreign particles found.
- The accessibility of FPS to avail foodgrains is easy and information access regarding distribution of foodgrains is mostly by self-visit or known from SMS alert as well as from fellow residents.
- The timings and days of open ration shop are also quite acceptable to the beneficiaries. Beneficiaries are well aware about toll free/helpline number however, they are not much familiarised on those institutions and their purpose such as DGRO/SFC and also not aware how to exercise their grievances on grievance redressal platform.
- Digitisation of beneficiary details and seeded Aadhaar number in ration card is almost

completed in Karnataka. However, mobile number seeding is completed only 50 per cent.

- Availing foodgrains by using e-PoS at FPS is very easy and time saving. The same is expressed by the beneficiaries. It is overwhelmed by all the beneficiaries in sample districts of Karnataka.
- It is observed that except a few occasions due to poor connectivity, over all the e-PoS machine functioned well at FPS level. But printed receipts are not made available to the beneficiaries.
- The beneficiaries expressed that the awareness and functioning of vigilance committee is well recognised but approaching to the vigilance committee for grievance redressal is hardly materialised.
- It is observed that the beneficiaries in sample districts of Karnataka give preference to foodgrains instead of cash.
- Digital payments option was hardly preferred as the foodgrains were provided at free of cost. The reasons for not preferring to cash subsidy are risk of misuse of cash for other than food items and market price of foodgrains is higher.
- It is observed that the allotment and distribution is totally transparent (online updation automatically) and no leakage points were observed.
- There is no delay in receiving of foodgrains and also no nomination/home delivery facility at FPS.
- Display of Information regarding working hours of FPS, entitlement of foodgrains, details of card holders and stock details are well maintained in all sample FPSs visited.
- Almost 100 per cent e-PoS found operational at FPSs. The beneficiaries as well as the FPS dealers expressed that the installation of e-PoS made it easy and time saving.
- The average time taken for biometric authentication was within 3 to 5 minutes, and 100 per cent foodgrain was sold after successful bio-authentication in sample FPS. It is hardly observed that RCs in sample FPS which reported biometric authentication failure.
- The display of information, transparency aspects as per NFSA guidelines are well maintained at FPS.
- The margin/profit and viability of FPS maintenance depends upon the number of ration cards allotted and performance of FPS dealer and also the FPS owner engages in other than the NFSA food items. But in the sample FPS visited in sample districts of Karnataka the FPS dealers were confined to NFSA foodgrains only.
- It was clear that the FPS owner is raising the income from two sources only (commission/margin and sale of gunny bags). It is observed that the entire sample FPS made profit more than Rs. 5000 per month.
- The Banking Correspondence (BC) and Common Service Centre (CSC) services were hardly found. However, some of the FPS owners are interested in delivery of CSC services as demanded by the beneficiaries.

- There is no online facility for apply of new FPS licenses and new licenses are issued manually.

IV. Supply chain management and FPS viability:

- The average capacity of sample godowns is 2000 M.T. The number of FPSs tagged to sample godown are varied in nature.
- The storage capacity of sample godowns is two-month requirements.
- The godowns are maintained by the Taluka Agricultural Producers Marketing Cooperative Societies (TAPMCS) and Karnataka Food and Civil Supplies Corporation (KFCSC) and these godowns are well maintained and modernised.
- Adequacy of storage capacity is observed by the study team in four sample districts visited. It is also observed that uninterrupted supply of foodgrains to the FPS is ensured.
- Movement of foodgrains, payment and SMS alert is fully automated and online in four sample districts. However, foodgrains weighed at godown with electronic weigh bridge linked to online system was hardly found.
- Food distribution calendar in sample districts is followed in 1-25 of every month and 100 per cent of foodgrains received on time by godown and the same is despatched to the concerned FPS tagged.
- There are no instances of not lifting entire allocated quantity within validity period reported by godown and diversion/black marketing.
- The doorstep delivery of foodgrains is ensured from godown to the FPS.
- There is no cost borne by FPS dealer for grain transportation & handling.
- The FPS closing balance/ration card number is fetched automatically for generation of allocation order through online.
- More or less 70 per cent has been covered under SMS alert. Soon after the delivery of foodgrains to the FPS, the SMS alert reached to GP Chairman, Vigilance Committee Members, Taluka Panchayat Members and FPS owner.
- The receipt of stock from wholesale transporters and dispatch of stock to retail transporters and fair price shop owners is based on online stock and online billing at wholesale godowns.
- Stock position of all godowns & FPSs are captured online in real-time manner. Delivery Orders, Release Orders, Truck Challans, Gate Passes, etc., for NFSA commodities are generated from system and they are available on Transparency Portals. They are system generated. At present, only delivery order and Truck Challan are generated in Taluk godowns.
- Payment acknowledgement is not generated online. Details of allocation, off take and distribution are reported correctly on NFSA dashboard. The allotment and lifting statistics is available on the FIST/FCS dashboard of the department.

The following functionality is available for use in PoS.

- e-KYC, Best Finger Detection and Fusion finger.
- Seed or update Aadhaar/Mobile and obtain consent from beneficiaries regarding use of Aadhaar.
- Not integrated electronic weighing machine (Bluetooth/ Cable) at godowns and FPSs online.
- No local language interface –voice over/printed in local language.
- Micro-ATM functionality to perform BC and CSC operations is in progress, waiting for CSC to provide login IDs.
- Total transactions in the district are reflected in the State portal and Central Portal (Annavitaran).
- There is a system in place at the district level to assess the Silent Ration Cards (RCs against which foodgrains are not lifted for three consecutive months) - VCMs are involved for field verification regularly.
- State level portability is already implemented to address the issues of foodgrains allocation and distribution between FPS dealers and consumers.

V. Grievance redressal system & Vigilance committee:

- None of the vigilance committee members (sample VCs) are aware of the provision to make written complaint to DGRO.
- It is observed that vigilance committee members know some of the functions of FPS and implementation of NFSA but not fully aware. However, some of the sample FPS VCs functioned very efficiently, especially Haveri district FPS VCs. They conducted regular meetings and also maintained the minutes of the meeting.
- There is also a monthly taluk level review meeting headed by Tahsildar for reviewing the implementation of PDS.
- It is correlated with some of the beneficiaries that the functions of vigilance committee members at different point of time in various meetings is discussed and ensured. The decisions taken in the meeting are on server problem, non-PDS items and alternative arrangements for thumb impression of old age people.
- It is observed that there is a review meeting in the district under Karnataka Development Programme (KDP), PDS is one of the subjects reviewed every quarterly. Where concerned MLAs, In-charge Minister and Zilla Panchayat Members are present and provide suggestions time-to-time for better delivery of PDS.

VI. Portability, Digital payment & Cash Transfers:

- Installation and use of portability, digital payment arrangements are hardly found at FPs shops. Though facility is available in both rural and urban areas, rural people are not in tuned to the portability facility. However, the urban people are availing the portability facility (more than 1.50 lakh beneficiaries are availing the portability facility in Bengaluru city). Some of the beneficiaries as well as FPS dealers expressed that they are interested in availing/performing CSC services. None of the HH prefers cash transfers instead of foodgrains.

Recommendations / Suggestions

- More income has to be generated to meet Administration Expenditure
- It should be ensured that the weighing machine is linked to online (e-PoS) system
- While appreciating the delivery of NFSA foodgrains to the beneficiaries, majority of the beneficiaries demanded for other commodities. The State government may provide or make available other items along with rice (wheat, sugar, ragi, etc.) for the beneficiaries.
- Introduction of CSC facilities at FPS level.
- Revisiting the Vigilance Committees at FPS level needs to be strengthened. It is also recommended that regular monitoring, periodic meetings and follow-up of the DGRO and vigilance committees at district, FPS levels should be ensured.

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EVALUATION STUDY ON IMPACT OF INDIRA AWAAS YOJANA (IAY) ON RURAL PEOPLE OF TRIPURA

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Introduction

The Indira Awaas Yojana (IAY), a Centrally sponsored scheme of Ministry of Rural Development, Government of India is one of the most important poverty alleviation programmes in the country. This scheme is being implemented in all the districts of the Tripura through Rural Development Department, Government of Tripura on 90:10 cost sharing basis between centre and State respectively since 1st January, 1996.

The main objective of the scheme is to provide a financial aid to the members of scheduled castes/scheduled tribes, freed bonded labourers and also to other non-scheduled castes/scheduled tribes rural poor below the poverty line for the construction of their dwelling units by providing them a lump sum amount as financial assistance. This scheme has been restructured by the Ministry of Rural Development, Government of India as Pradhan Mantri Awas Yojana- Gramin (PMAY-G) with effect from 1st April, 2016. This study has evaluated the impact of IAY scheme on rural people of Tripura. This may help the implementing authorities for better implementation of PMAY –G.

Objectives

- To examine the quality of houses and level of satisfaction of the beneficiaries
- To evaluate the socio-economic impact of IAY on the quality of life of beneficiaries
- To understand the constraints, analyse provisions and the process of implementation of IAY programme.

Research Methodology

The study is based on the primary and secondary data, which was collected through instruments structured at different levels. The secondary data was collected from State headquarters, i.e., Rural Development Department, Government of Tripura and also from the awaassoft.nic.in website. Secondary data was also collected from the Block headquarters concerned. Detailed discussions were held with the officials/officers at various levels to gather information on implementation of the scheme. Primary data was collected from beneficiaries of the scheme through field surveys. The survey schedules covered a host of areas starting with the socio-economic characteristics of the beneficiaries, level of awareness about the scheme, problems encountered, implementation process, level of satisfaction, impact of scheme, etc. For assessing the impact of Indira Awaas Yojana, work done during the years 2010-11 to 2014-15 was covered under the sample study.

Study Area

This study was conducted in four districts of Tripura, i.e., West Tripura, South Tripura, North Tripura, Dhalai. From each district, three blocks, and from each block two Gram Panchayats were selected on the basis of maximum number of houses constructed during the financial year 2010-11 to 2014-15. From each Gram Panchayat, 10 beneficiary households were selected randomly to whom new houses were allotted during the reference period.

Main Findings :

i) Demographic Details of IAY Beneficiary Households:

- It is found that 54 per cent of the total beneficiaries were women. South Tripura has the highest number of female beneficiaries, i.e., 78 per cent, followed by West Tripura, having 52 per cent female beneficiaries. But in North Tripura and Dhalai, majority of beneficiaries are males, i.e., 60 per cent in North Tripura and 55 per cent in Dhalai.
- The study reveals that 57 per cent of the sampled beneficiaries were found illiterate.
- It is also found that 60 of the sampled beneficiaries had a family size of 4-6 members followed by 73 (30 per cent) households with size of 1-3 family members and 24 (10 per cent) sampled households with size of 7-9 family members.

ii) Socio-economic status of IAY beneficiary households:

- It is found that majority of the beneficiaries belong to ST category (48 per cent) and SC category (28 per cent). OBC stands as third highest category of beneficiaries with 17 per cent, while the percentage of UR and minority is very less, i.e., UR five per cent and minority three per cent.
- The study shows that majority of the beneficiaries were BPL card holders i.e., 78 per cent of the total sample was followed by 21 per cent Antyodaya card holders and one per cent APL card holders.
- It was found that 43 per cent of the beneficiary had only 2-3 kani of land while 23 per cent beneficiary had 0-1 kani of land.
- Majority of the beneficiary (i.e., 91 per cent) households were involved in MGNREGA works. However, 53 per cent of them were involved in non-agriculture labour activities, whereas 17 per cent were involved in agricultural activities.

iii) IAY Implementation Process:

- It is found that houses were allotted mostly in the name of women. Fifty-four per cent

of the sampled beneficiaries were female. It is also noticed that in none of the 240 sampled beneficiaries was found physically challenged.

- Majority of the IAY houses have been constructed by the beneficiaries themselves (95 per cent). However, three percent of the houses were constructed by PRI, where as one percent houses were built by NGO.
- It is found that 95 per cent of the sampled beneficiaries received the full financial assistance in three instalments.
- During the interrogation with the sampled beneficiaries, it is found that the financial assistance was not sufficient to construct a house in true manner. Therefore, 97 per cent of the sampled beneficiaries claimed that without their own contribution it was impossible for them to construct a house.
- It is found that majority of beneficiary were not given any stipulated time period to complete the work of house construction. Among all the districts West Tripura and Dhalai has the highest number of such cases i.e., 98 per cent in West Tripura and 93 per cent in Dhalai.
- Data revealed that 35 per cent of the total sampled beneficiary completed the construction of their house in six months and 23 per cent beneficiary completed the construction work within a year, there were 19 per cent cases who could not answer the question specifically and 13 per cent beneficiary don't remember when or how much time was taken to complete the construction of the house.

iv) Display of IAY Board and Logo:

- It has been found that majority of the IAY beneficiaries have failed in the display of IAY logo prominently on the newly constructed IAY house. Among them a majority of beneficiary reasoned that the board and logo was not provided to them. It is observed that 88 per cent of IAY house did not have any IAY board and logo display around it.

v) Role of Panchayati Raj Institutions in the implementation of the Scheme:

- It is found that in every district majority of the beneficiary were not given any instruction on how to construct the IAY house.
- However, only 35 per cent of the total beneficiaries were given information on how to construct the IAY house. Among these beneficiaries 82 per cent instruction was provided by Gram Pradhan while 66 per cent instruction was provided by Panchayat Secretary as well.

vi) Features and facilities of new IAY houses of the beneficiary households:

- It is found that floor of 43 per cent houses was made by brick, sand and cement, while 51 per cent floors are just made with mud.
- Majority of the IAY house (63 per cent) walls were pucca, made of brick, sand, cement. In west Tripura (65 per cent), north Tripura (98 per cent) and Dhalai (55 per cent) majority of the house walls were found pucca, however in South Tripura only 30 per cent houses have pucca walls and majority of the house walls i.e., 50 per cent were made of mud.
- Study reveals that in every district majority (93 per cent) of the IAY house roofs were made of tin and wood.
- While it was found that 73 per cent of the house windows and doors were made of wood, 13 per cent house windows and doors were under construction.
- Most of the IAY houses i.e., 53 per cent had two rooms, while 45 per cent of the houses had single room. Only four per cent houses had kitchen in them.

vii) Public amenities and facilities available:

- It is found that 92 sampled households were connected with electricity while 60 per cent sampled households were provided safe drinking water facility. It is also noticeable that, the availability of drainage facility was very poor.
- The study reveals that 79 per cent of IAY houses are located within a distance of 1 km from the GP. In west Tripura (82 per cent), south Tripura (90 per cent), north Tripura (60 per cent) and in Dhalai (83 per cent) the distance from the main village was within 1 km.
- It is found that all the IAY houses were connected with approach roads. These roads were further connected with the main road.
- AWCs (96 per cent) and schools (87 per cent) situated less than 1 km distance of most of the IAY houses.
- Primary Health Centre is located at a distance below 1 km for majority of the IAY households (80 per cent).
- Drinking water is available for most of the households (96 per cent) within a distance of one km.
- With regard to work place, majority of the IAY beneficiaries (88 per cent) have their workplace within 5 km.
- Market is available for most of the households (71 per cent) within a distance of one km. While 23 per cent of the beneficiary cover almost 2 km to reach the market.

viii) Impact of IAY houses in the daily routine of the children of the IAY households:

- It is found that 63 per cent of the beneficiary had school-going children.
- The regularity and sustainability of the children of the IAY households have increased as it is found that 92 per cent of the beneficiary children were attending school before the construction of IAY house, however, at present, 97 per cent children are attending school regularly.
- The children, who are not attending school, are not engaged with any income generation activities.

ix) Change in socio-economic condition of sanitation after the possession of IAY house:

- It has been found that before the implementation of the scheme, majority of the beneficiaries had kutcha house (53 per cent) and houses made of thatch (43 per cent) and almost none of the beneficiary had pucca house. At present, a majority of beneficiary have pucca house (34 per cent) as well as semi-pucca house (33 per cent).
- The study reveals that before the scheme only six per cent beneficiaries were using sanitary latrine. However, at present 25 per cent of beneficiaries are using sanitary latrine.
- Majority of the beneficiary were depended on well (45 per cent), hand pump (20 per cent), tube well (20 per cent) and the sources are still same as majority.
- It is observed that majority of the beneficiary had financial growth in their annual family income i.e., 53 per cent while 45 per cent of the beneficiaries did not find any change in their annual family income.

x) Improvement in the economic status of the IAY beneficiary households

- There is some improvement in the clothing and adequacy of meals of the households of IAY beneficiaries after the possession of IAY houses.
- Study reveals that there is an improvement in having assets after the scheme benefits i.e., TV (before 36 per cent, after 54 per cent) and fan (before 59 per cent, after 72 per cent).
- The standard of living has also been reported to be better after the possession of IAY house in the lives of the IAY beneficiaries.

xi) Satisfactory level of IAY beneficiaries:

- It has been found that majority of the IAY beneficiaries (about 94 per cent) were satisfied with the house constructed under the scheme. Among them, 15 per cent of the sampled beneficiaries were highly satisfied. Thirty-one per cent of them reasoned that they gained financial support while 26 per cent of them were satisfied with the scheme benefits. Other 10 per cent beneficiaries reasoned that it provided them better housing facilities than before.

Conclusion

From the foregoing, it may be concluded that IAY has benefited a number of families in the State. Almost all the beneficiaries were satisfied with the implementation of the scheme. This study has evaluated the impact of IAY scheme on rural people of Tripura. Hopefully, the findings will help the implementing authorities of different level to know the strength and weakness of its implementation mechanism.

There was an achievement of 18,854 dwelling units in selected four districts of Tripura during the years 2011-12 to 2015-16. In the light of objectives of the study, it has been observed that the scheme was implemented successfully in the State by achieving its objectives. However, some shortcomings have been mentioned in the report. This may help the implementing authorities for better implementation of PMAY-G.

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LEADERSHIP SKILLS OF WOMEN ELECTED REPRESENTATIVES IN GOA

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Introduction

Women constitute half the population of India, and therefore their participation in politics for the socio-economic progress of the community becomes very crucial. This has been rightly adopted by the makers of Indian Constitution. Since independence, the Constitution enshrined the principle of gender equality in its preamble, fundamental rights, fundamental duties and directive principles of State policy. Besides these, various laws have been passed from time-to-time to uplift women and there are various non-governmental organisations working towards their development.

Despite all such constitutional provisions and plans, there has been less satisfactory development in their social, political and economic status. The studies conducted on women empowerment identifies the reasons for less women political participation as illiteracy, unawareness of rights, duties and responsibilities, male hypocrisy, conservative mind-set of society, wherein politics is considered as a male domain. Besides, women participating in politics have a very little say in decision-making due to male dominance in politics. All these reasons impacted upon their confidence resulting in a very less number of women participating in politics.

However, from last two decades since the introduction of 73rd Amendment Act with 33 per cent reservation, there could be seen the increase in women participation in contesting Panchayat elections and getting elected as the representatives of the people. Being representatives, women still face various socio-economic and political constraints due to various reasons, which is challenging their leadership at the grassroots level.

This research attempts to study the leadership skills of women in politics at grassroots level with special reference to Goa.

Objectives

1. To assess the role and competency of elected women members in terms of governance, equity and participation at grassroots level.
2. To identify the key enabling factors and obstacles before the women members to participate, control and sustain development through Gram Panchayats (PRI).
3. To study the socio-economic and political development under the leadership of women and its impact on electoral politics.
4. To examine necessitate of capacity building training towards women empowerment.

Methodology

Given the qualitative character of the objectives, the following methods and tools were used for primary data collection.

1. Interaction with women elected representatives of Gram Panchayat through focus group discussion. There will be four focus group discussions; one from each block.
2. The total sample size is 120 which investigators will randomly select in following category.
   a) Women elected representatives 10 from each group which total up the sample size to 40.
   b) Women respondents of different categories and also different communities to represent the whole scenario of the studied area. Total randomly selected sample size is 20 from each four-block selected for the study which total up the sample size 80. The women respondents will be interacted with the help of questionnaire.
3. The views of male elected representative will also be included with the help of questionnaire. Total sample size is 40, which includes 10 male elected representatives from each four-block selected for the study.
4. Views of government officials such as Block Development Officers and Village Panchayat secretaries from selected area of study will be gathered by way of interviews.

Secondary data available in the form of paper clippings, books and online sources were used for supplementing and reconstructing information about the process in the sample villages. The other requisite data will also be collected from Directorate of Panchayats.

Study Area:

Since the study is on analysing the women leadership in local self-government, the universe of the study covers four development blocks - firstly, Bardez and Tiswadi from North Goa and secondly, Quepem and Salcete from South Goa and Panchayats therein.

Findings:

- To test perception of the people on performance of women elected representatives several cross questions were asked to the male elected respondents and women respondents from the Panchayats. As many respondents did not answer some questions directly, many sub cross-questions were asked to arrive at some conclusions which showed that people of the selected blocks for the study are to some extent satisfied with the performance of women elected representatives. But, at the same time, the researcher has observed that most of elected representatives are elected only because the seats are reserved for women candidates.

- While discussing the accessibility of the women elected representatives with in their Panchayats it was found that Sarpanch visits all the wards of Panchayats but do not have a schedule. Interestingly it was found that Sarpanch is easily accessible to people. It is the duty of the elected representative to collect the demands of the people and address their problems as the people elect them for their common welfare.
- In order to understand the integrity and accountability of the women elected representatives' people were asked several questions. However, the response of the people on integrity and accountability was very poor as most of the respondents said that women elected representatives are dependent while taking decisions at Panchayat level. They either depend upon male elected representatives of the Panchayats or on their male members from family.
- For the development of the Panchayat, it is necessary that the elected representatives must raise the Panchayats issues before the Block Development Officer, Directorate of Panchayats and MLA of the constituency and try to solve the Panchayat problems. In order to know whether women elected representatives have raised the Panchayats issues before the above-mentioned stakeholders and to solve the Panchayat problems some questions were asked to which respondents replied that women elected representatives are putting their grievances before the stakeholders and trying to get it solved which is a good sign of women progress in politics that women are coming forward.
- As the responses to the accessibility, responsiveness to the problems and integrity and accountability of women sarpanches is quite satisfactory to some extent. From this, the question arises what development has been done by the women Sarpanch for the last five years.
- On the developmental activities carried out by the women sarpanches in the Panchayat for the last five years, people are of satisfactory opinion as most of the respondents said that situation of the most of developmental activities is satisfactorily improved and some said it is same as before.
- However, interestingly during the course of interview some respondents expressed different views about the performance of the women elected representatives. Some of them said that women elected representatives have not done anything for Panchayats and they are dependent on male counterparts for the decisions. They further said they have elected the women elected representatives as the seat reserved for women.

Conclusion

For the development of society, the leaders have to play a very important role. Leaders must possess administrative knowledge and must take active part in the decision-making process as they are the elected representatives of the people. The development of any society also depends on the active performance of the elected representatives. The representative must be accountable, accessible, and responsive to the problems of the constituency. Finally, it is the people's perception on the performance of elected representatives that influences their work and further determines the development of nation.

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A CASE STUDY ON THE KNOWLEDGE AND PRACTICE OF ENVIRONMENTAL SANITATION IN EAST GARO HILLS DISTRICT MEGHALAYA

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Introduction

The rural sanitation programme in India was introduced in the year 1954 as a part of the First Five Year Plan of the Government of India. Shri Narendra Modi, Hon'ble Prime Minister launched Swachh Bharat Mission on Mahatma Gandhi's Jayanti (2nd October 2014), quoting the words of Mahatma Gandhi, "Sanitation is more important than independence."

'Swachh Bharat', which was described by the Prime Minister as "a massive mass movement that seeks to create a Clean India," has captured the imagination of a large section of the population. This is being pursued as a primary development goal. India is known as the location housing the largest number of people without access to improved sanitation. Massive number of people not gaining access or using adequate sanitation has led India, and the world as a whole, in not meeting the sanitation targets it had set itself as part of the Millennium Development Goals (MDGs).

Objectives

The main objective is to examine the causes of the Environmental Sanitation conditions in East Garo Hills its effects on appropriate intervention to improved sanitation in East Garo Hills. Specifically, the study seeks to achieve the following objectives:

A. To examine the quality of life in the rural/urban areas (Cleanliness, Hygiene, open defection) in East Garo Hills.

B. To examine the knowledge and practices of the households in relation to environmental sanitation and hygiene conditions in East Garo Hills.

C. To find out participation of respondents in the cleanliness initiative.

Methodology:

Two hundred households were selected randomly as a sample. The method used is a structured questionnaire and face-to-face interviews were conducted with three sections.

Section I– **Demographic profile**

Section II- **Knowledge of East Garo Hills people regarding sanitation and hygiene**
Maximum score on knowledge is 13 with score of 1 for each correct response. Knowledge

scoring grade from 9-13 were having a good knowledge, score 5-8 were having average knowledge and 0-4 were having poor knowledge.

It was found that out of 200 samples collected, 47.5 per cent were having a good knowledge, 37.5 per cent were having average knowledge and 15 per cent were having poor knowledge regarding sanitation and hygiene in the district.

Section III- **practice regarding home sanitation**

Maximum score on practice is 10 with score of 1 for each correct answer. Practice scoring from 8-10 were rated very good at practice, scoring 5-7 were rated good at practice and score 0-3 were rated poor at practice regarding practicing of home sanitation.

It was found out that out of 200 samples collected, 33.5 per cent were practicing very good, 43.5 per cent were practicing well, and 23 per cent were practicing poor regarding home sanitation in the district.

Study Area

East Garo Hills District Meghalaya.

Findings

- For drinking purpose most of the households use tap water supplied by the PHE department, whereas a few households use well water and also water from the spring.
- Majority of the households use plastic tank for storing water and some of them use aluminium container for storing water. Hundred per cent of them treat water for drinking purpose to make it safer. Majority of them use water filter and about 45 per cent boil it and 100 per cent of the household have individual household latrine and all of them are pit latrine. All of them agreed that advantage of having toilet facility improves hygiene/cleanliness, to avoid bad smell and reduce environmental contamination, prevents diseases and improves health.
- All the primary schools in the village have toilet facility and about 95 per cent are functioning well and 45 per cent are non-functional due to unavailability of water facility. Hundred per cent of Anganwadi centres have toilet facility.
- Most of them agreed that waste water makes the locality dirty. Some said (10 per cent) it spreads germs and the rest said it generated foul smell. Majority of the household have a waste pit in order to dispose domestic liquid waste and some (5 per cent) dispose anywhere in the compound and about 10 per cent dispose outside the premises and the rest disposed in the streams. Most of the villagers in East Garo Hills district do not have dustbins. In order to be aware about sanitation and hygiene, 90 per cent of the village organised a cleaning drive thrice a year and the villagers actively participate.
- To regulate waste materials in their village, 40 per cent of the village has community dustbins.

- Majority of the sample (87.5 per cent) organised cleaning drive in their village thrice a year and 12.5 per cent do not organise at all. The villages that organised a cleaning drive agreed that organising it makes people aware about keeping their environment clean and most of the inhabitants are satisfactory about cleanliness in their local environment.
- Sixty per cent of respondents state that animal faeces were mostly found in their local environment, 20 per cent complained about stagnation of water whereas 20 per cent stated that they are facing stagnation of water and find animal and human faeces in their local environment.
- The entire village organised a cleaning drive and agreed that organising a cleaning drive makes people conscious about keeping the environment clean. After cleaning, 60 per cent of households throw waste in the dustbins and 40 per cent throw outside the house. The entire households do not have separate dustbins for plastic waste so they throw all the waste in single dustbin. Degradable and non-degradable waste are collected in one dustbin.
- Majority of the households (60 per cent) do not have bathroom facilities so they use to take bath outside, only 40 per cent of them have a bathroom.
- Most of the sample do not utilise separate dustbin for plastic waste and 100 per cent of them throw both degradable and non-degradable waste in single dustbin.
- Most of the households are aware that poor environmental sanitation affects the health of the people and only 20 per cent are unaware of it. Ninety per cent of household agreed that health of the people depends on environmental sanitation and they also agreed that poor environmental sanitation is more prone to diseases and very few 10 per cent said they do not know.

Conclusions

The campaign brings focus to the pressing transformational need of the nation. The change is evident as India embarks on its journey to create a clean and hygiene environment. The findings are in consonance with the people of East Garo Hills district.

All the households have a pit toilet as they all know the benefit of having toilet facility so the village has become zero defecation village. However, it is not sanitary toilet. All the toilets in the primary schools in the village are functioning well except for some due to unavailability of water. Majority of the respondents agreed that waste water makes the region dirty. Only few households do not have a proper waste pit so it requires sensitising the people to have proper waste pit.

The mindset of the people is different when enquired about the inappropriate waste water. Some said it makes the locality dirty while few opined that it spreads germs and the rest said it causes foul smell. Some dispose domestic liquid waste in the stream and while a few let it outside the premises; hence, the villagers must be oriented regarding the ill-effects of throwing the waste. Village dustbin is also important and necessary in every village in

order to maintain hygiene in the village, only few villages have a dustbin. Organising a cleaning drive makes people conscious about keeping the environment clean and majority of household State that their village organised a cleaning drive.

About 60 per cent of household are satisfied with regard to cleanliness in their local environment. Majority of the respondents say that animal faeces are mostly found in the local environment, so they should be sensitised of the ill-effects of waste found in their area. Consequently, the village head or the village community should step forward seriously by making some regulation so that the difficulty in the village will be resolved. Half of the households do not have a proper dustbin to throw the waste so after cleaning the house they throw outside the house.

Only few households have special container for plastic waste so they should sensitise to use it. Not even a single household has separate dustbins for degradable and non-degradable waste subsequently both are collected in one dustbin. Majority of the household do not have a bathroom so they use to take bath outside.

Most of respondents thought that health of the people depends on the environment that they lived in and it is the environment that shows the well-being of the people. It is also the environmental hygiene that makes their lives vulnerable to diseases, they believe.

Most of the people from East Garo Hills were having an average knowledge regarding home sanitation. It was found that knowledge and practice on sanitation and hygiene is not based on the level of education that they have but, it depends on the practice that they are doing earlier. So, advanced knowledge and practice is very much necessary for the well-being of citizens of East Garo Hills district.

The Hygiene and Sanitation Department (Municipal Board) should make organising regular public health education on social institutions a part of its duty.

Recommendations

- Educating young generations in schools and anganwadi centres about ill-effects of poor environmental sanitation and hygiene.
- Awareness on sanitation and hygiene in the village to improve hygiene practices of the citizen.
- The committee of the village and the municipal board should sensitise people regarding use of separate dustbins for degradable and non-degradable waste.
- Every household in the village should have a proper drainage system and they should also utilise proper waste pit for disposing garbage.

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COMPARATIVE STUDIES BETWEEN SLOPING AGRICULTURAL LAND TECHNOLOGY (SALT) AND NON- SLOPING AGRICULTURAL LAND TECHNOLOGY IN LUNGLEI DISTRICT, MIZORAM, INDIA

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Introduction

Agriculture plays a vital role in India's economy. A total of 54.6 per cent of the population is engaged in agriculture and allied activities (Census 2011) and it contributes 17.4 per cent to the country's Gross Value Added for the year 2016-17 (at current prices). Given the importance of agriculture sector, Government of India took several steps for its sustainable development (Central Statistics Office, Ministry of Statistics and Programme Implementation, Govt. of India.)

In the State of Mizoram, the Primary Sector comprising agriculture & allied activities contributed 17.5 per cent (2014-15) to the GSDP. With livelihood of about 60 per cent of the population depending on agriculture and allied activities, faster growth in agriculture is both a necessary and sufficient condition for stronger, sustainable and inclusive growth in the State (Economic Survey Mizoram 2015-16). Economy of Mizoram is predominantly agrarian, with more than 60 per cent of the total work force engaged either directly or indirectly in agriculture. However, agriculture still remains underdeveloped and the primitive method of jhum (shifting cultivation) predominates. Both production and productivity are relatively low. Majority of the land falls under class-II to class-IV categories of land use capability, requiring appropriate soil management practices for intensive crop production (Mizoram SAPCC 2012-17).

Mizoram has a varied blend of climatic conditions ranging from tropical, sub-tropical to temperate conditions. The State has high mean annual rainfall of 2500 mm and high relative humidity up to 90 per cent. There is plenty of rainfall in a concentrated period of six months, leaving rest of the months relatively dry and water scarce (Mizoram SAPCC 2012-17). Mizoram has primarily sand-loamy and clay-loamy soil rich in organic carbon and moderately rich in available potash. Due to high rainfall during May to September, soil is acidic ranging from 4.5-5.6 pH. The fertility of soils is affected by the cultivation practices employed by the people, soil erosion, landslides associated with high intensity rainfall and hailstorm. The temperature during summer season varies from 20°C to 34°C and during the winter season varies from 8°C to 17°C.

In Mizoram, due to limited availability of irrigation, agriculture is entirely dependent on the rainwater from the driving monsoon downpours. The unfavourable physical conditions do

not facilitate irrigated crop production, leading to only 5 per cent of the total area under cultivation and 11 per cent of the total cultivated area under irrigation (Mizoram SAPCC 2012-17).

The hilly areas of the north-east region of India, where shifting cultivation practice is spread over a large area, needs attention despite the efforts taken by the government. Shifting cultivation is the most prominent farming system, providing a way of life for a large number of ethnic minorities and other poor and marginalised upland communities. However, the current problems related to shifting cultivation are often found to be as much a result of inappropriate land-use practices. Therefore, there is a need across the region for new, more effective and socially more acceptable policy options that can help improve shifting cultivation, rather than replace it.

Alley cropping is a farming system in which food crops are planted in alleys between hedges of trees or shrubs or a combination of both (Kang et al., 1981). A `contour hedgerow system' is an alley cropping system with hedgerows planted on the contour on sloping land. Hedgerows facilitate terrace formation as soil transported from land at a higher elevation is collected behind the hedges. Terrace formation may occur rapidly as tillage operations are often performed in such a manner that soil is moved downhill within the alleyway (Garrity, 1993).

Objectives

1. To compare the productivity of crop in Sloping Agricultural Land Technology (SALT) and Non-Sloping Agricultural Land Technology.
2. To analyse the reasons for non-adoption of Sloping Agricultural Land Technology (SALT)
3. To analyse the factors that promote the farmers to adopt Sloping Agricultural Land Technology (SALT)

Methodology

As per the proposal submitted to National Institute of Rural Development and Panchayati Raj, Hyderabad, five farmers practising Sloping Agricultural Land Technology and five farmers who do not practice Sloping Agricultural Land Technology were identified and selected for the study.

Data was collected using questionnaire and field work. The farmers were asked to answer different questions regarding their works which relates to their farm. Measurement of crop was taken by the farmers by themselves. Before going into field for taking measurement, the farmers were given instructions thoroughly.

Focus Group Discussion (FGD) was also held to discuss the topics that are related to farming. In focus group discussion, a lot of queries are made and the advantages and disadvantages of Sloping Agricultural Land Technology were discussed. Farmers highlighted the different problems they faced for establishing a permanent farming system.

Study Area

Lunglei district is one of the eight districts of Mizoram State in India.

Findings

Orange (*Citrus reticulata)*

An effect of SALT treatment is clearly seen in the experiment which is done intended to compare SALT and Non-SALT treatment for 13 year old orange orchard, taking fifty individual reading each in SALT and Non-SALT. Results show that SALT has a prominent effect on all the parameter studied:

i. An increase in average height of 3.54 ft is observed.

ii. An average increment in size of 1.24inches is observed.

iii. An average increase in number of fruits of 59.8 is observed.

Stink bean (*Parkia speciosa*)

An effect of SALT treatment is clearly seen in the experiment which is done intended to compare SALT and Non-SALT treatment for 8 year old Stink bean plant, taking fifty individual reading each in SALT and Non-SALT. Results show that SALT has a prominent effect on all the parameter studied:

i. An increase in average height of 2.76 ft is observed.

ii. An average increment in size of 2.88 inches is observed.

iii. An average increase in number of fruits of 34.7 is observed.

Banana (*Musa sp.*)

An effect of SALT treatment is clearly seen in the experiment which is done intended to compare SALT and Non-SALT treatment for 8-year-old banana plant, taking fifty individual reading each in SALT and Non-SALT. Results show that SALT has a prominent effect on all the parameter studied:

i. An increase in average height of 1.46 ft is observed.

ii. An average increase in number of fruits of 5.08 is observed.

Climbing wattle (*Senegalia pennata*)

An effect of SALT treatment is clearly seen in the experiment which is done intended to compare SALT and Non-SALT treatment for 5-year-old Climbing wattle plant, taking 20 individual reading each in SALT and Non- SALT. Results show that SALT has a prominent effect on all the parameter studied:

i. An increase in average height of 5.05 ft is observed.

ii. An average increment in size of 2.25 inches is observed.

Coffee (*Coffea sp.)*

An effect of SALT treatment is clearly seen in the experiment which is done intended to compare SALT and Non-SALT treatment for 5-year-old coffee plant, taking thirty individual reading each in SALT and Non-SALT. Results show that SALT has a prominent effect on all the parameter studied:

i. An increase in average height of 0.1 ft is observed.

ii. An average increment in size of 0.2 inches is observed.

iii. An average increase in number of fruits of 361.67 is observed.

During focus group discussion, farmers who do not practice Sloping Agriculture Land Technology were asked the reason for not adopting the technology. The farmers responded that they need knowledge to execute the technology.

To adopt Sloping Agriculture Land Technology, the farmers need to know all the technique and process in such a way that they can execute the technology in a proper way. At the same time, some farmers stick to the local practice of farming and cultivation as they are bonded with the local tradition of farming system. They hesitate to change their local traditional practices because they are not familiar with the new system of farming. Some farmers also mention that their age is also a factor for not adopting the technology. They said that they are too old to start a new system. In the meantime, the farmers added that had they knew the technology beforehand and at beginning of their farming career, they might have adopted it.

During early times, the procurement of nitrogen fixing plant seeds is difficult, and it needs longer time to secure it. This was cited as another reason for not adopting Sloping Agriculture Land Technology. The farmers also said that they need proper guidance and supervision if they had to adopt the technology.

Farmers who adopted Sloping Agriculture Land Technology have undergone training, which encouraged them to make decision and adopt the technology. During initial years, the farmer said that they have to work thoroughly to execute the technology as it was new.

The incidents of fire and pest have created many problems for the farmers adopting both Sloping Agriculture Land Technology and Non-Sloping Agriculture Land Technology. The total crop area damage due to fire is 178.85 lakh hectares, and the estimated crop loss due to fire is Rs. 2.48 crore (State of Environment Report of Mizoram).

Disease and pest incidents create huge problems for the farmers. During focus group discussion, the farmers reported that due to dieback of orange crop, the whole plantation was affected and the exact reason for the cause was not known.

Conclusions

In the light of the results and observation during the study, the following conclusion about comparative studies between Sloping Agricultural Land Technology (SALT) and Non-Sloping Agricultural Land Technology in Lunglei district can be arrived at:

- Sloping Agricultural Land Technology plays a positive increment in height, size and most importantly in number of fruits borne by the selected crops.
- During the course of study, Focus Group Discussion (FGD) and interview of farmers were conducted. It is found out that the farmers who do not adopt Sloping Agricultural Land Technology farming system were aware of soil erosion and depletion of soil organic nutrients. But they hardly take any measures to control soil erosion. The reason of non-adoption of Sloping Agricultural Land Technology in their farm is mainly due to their lack of knowledge about Sloping Agricultural Land Technology. This points to the necessity of creating awareness among the farmers. In this regard, training must be conducted to make farmers aware of the Sloping Agricultural Land Technology.
- The problem commonly faced by both Sloping Agricultural Land Technology farmers and Non-SALT farmers is fire hazard. Fires often cause damage to their crops. It is necessary to take steps to control and prevent fire, especially during the dry season. The necessary steps for prevention and control of fire can be taken through the intervention of government departments concerned, Village Council and NGOs.
- There are problems related to pest and diseases of crops, which have created many setbacks for the farmers. For example, the dieback of orange plant is a serious issue as affects almost the entire plants in the farm. The department and scientists concerned are still working to find out the cause and the remedial measures.
- The success of farmers who adopted Sloping Agricultural Land Technology when compared to those who do not adopt the method is observed. The reason for the success of Sloping Agricultural Land Technology can be credited due to proper planning, management and vision. The Sloping Agricultural Land Technology motivates the farmers to achieve their goals.
- Sloping Agricultural Land Technology is a promising technique for farmers, especially for those in the hilly regions. It can be a useful technique to mitigate and reduce the intensity of the outdated practice of shifting cultivation. The technique will help to generate of income, uplift the livelihood of the farmers, and adopt a sustainable farming system.

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A CASE STUDY ON SAVING BEHAVIOUR AMONG THE GARO TRIBE OF MEGHALAYA

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Introduction

Most individuals and families hold the view that the primary aim of earning money is to be able to spend it to meet their immediate needs and wants and that the future will cater for itself. For such persons, savings and investment are not the options. Many people also hold the view that saving and investment is a moral habit and persons need to save since the future is uncertain. Many individuals and families in both developed and developing countries believe that savings and investment serve as a form of financial security to them.

Objectives

1. Explore the form of savings in the village
2. Examine the motives for household savings
3. Investigate the factors that affect the savings of household

Study Area

East Garo Hills district of Meghalaya

Findings

Majority of the respondents are in the age group of 40-50 years; of them, 210 are females. This shows that females stay at home for household work and look after the children while male members go out for work. Almost, all the family prefer to be independent so they opt for nuclear family. Most of the respondents have the educational qualification of Class X. Most of the respondents are daily wage workers and hence they earn weekly. When enquired about household savings, most of the respondents spend mostly on paddy fields, and animals like goats while a few use to keep cash in hand. If they need money during emergency, they used to mortgage or sell their land or animals. Accordingly, people use to save in diverse form after becoming conscious of financial requirements during emergency situations. Most of them spent the money left after the monthly expenses to buy food, which means that household are conscious for food. Most of the household have bank accounts and their average monthly saving in Bank is Rs 100-500. Those who do not have accounts opined that they do not have enough money to open an account. The study shows that most of the households were aware of the importance of savings, and thus they save in the Bank.

For making purchases for family, most of the households do not make any proper plan. If they have cash in their hand, they use to buy without making appropriate plan and some

used to buy things just for avarice. Most of the household lack of proper planning when it comes to purchase. Buying goods for household depends on having money that they have as hard cash. Majority of the household do keep a record of their monthly expenditure nor do they make any monthly budget, which shows that the households hardly give any importance to monthly budget. In marriages and funerals, in order to help each other, they use to contribute in cash and some in kind. Most of samples collected used to contribute in kind. This means that majority of the household use to tame animals as saving for this purpose.

Majority of the rural households are spending money on smoking/chewing tobacco and they also have to spend around Rs.1000 yearly for medical treatment. They are also very conscious to clear the electricity bills before the due date. The study shows that most of the households utilise the fund that they kept as saving (money saved by mortgaging or selling the land or animals), during emergency situations.

Conclusion

The study on saving behaviour has shown a considerable significance and non-significance which helped in analysing the saving behaviour of rural households among the Garo Tribe of Meghalaya. Most of the rural household are engaged in Agriculture and they have their own land/Animals which form an asset for them during emergency even if they have a small plot of land it works as a financial component by means of mortgaging or selling. Most of the rural household have low educational status. They are even careless towards their health standard as the consumption of tobacco and smoking is very prominent in this household which deteriorates their health as well as financial condition of the household. A good number of the household care about the children's education and State that if they have money they used to save for their education. Majority of the household have bank account. Those households which does not have says that they do not have enough money to keep in the Bank. Most of the household do not make budget nor they record on what they spend during a month and they do not make any plan if they need to buy anything for their family. In marriages and funerals most of the household use to contribute in kind then in cash and most of the household are indulge in smoking/chewing tobacco.

Recommendations

1. Every household should have proper planning if they need to make a purchase.
2. Every household should make a monthly budget.
3. Every household should quit unhealthy habits, such as chewing of tobacco and smoking.
4. If possible, every household should open a bank account.

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ANALYSIS OF IMPLEMENTATION & BEST PRACTICES OF SWACHH BHARAT MISSION – A CASE STUDY OF KALAHANDI DISTRICT OF ODISHA

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Introduction

The sanitation broadly includes liquid and solid waste disposal, personal and food related hygiene and domestic as well as environmental hygiene. It would not be wrong to say that it hardly describes the sanitary conditions as they obtain in the villages of India. Most of the people still defecate in the open space, most of the villages lack waste disposal and drainage systems and many in the villages are ignorant about the consequences of poor sanitation and unhygienic conditions. As a result, many people suffer and even die of diseases caused by unhealthy practices of personal and environmental hygiene.

In villages most of the diseases can be prevented easily, if people have proper sanitary facilities and follow good practices of hygiene, i.e., use proper latrines, build drainage and garbage disposal systems, wash hands after defecation and before eating food, use safe drinking water and clean food, take care of personal hygiene, use appropriate place and fuel for cooking, arrange proper ventilation in their houses, provide proper and clean sheds for the cattle, etc.

One of the major causes of human misery in the villages is the lack of latrines. People defecate in the open spaces in and around their habitation, making it not only dirty but also responsible for many infectious diseases. In fact, open human excreta i.e., faeces & urine, stagnant water and garbage are the ideal breeding ground for flies, mosquitoes & microbes, which act as carriers of dangerous diseases.

The major cause of common diseases and sickness among village communities is the lack of safe drinking water supply and good sanitary facilities for the disposal of human wastes. If by some means people are prevented from drinking unsafe water or coming into contact with faecal matter, transmission of diseases can be controlled. Most diseases can be prevented, if people get used to:

⇒ Using safe water for drinking, washing raw vegetables and fruits and cleaning utensils,

⇒ Washing hands after defecation and before handling or eating food,

⇒ Using clean latrines,

⇒ Covering food items to ward off flies,

⇒ Disposing waste water and garbage properly,

⇒ Avoiding barefoot walks on soiled excreta &

⇒ Treating stagnant water with chlorine to destroy the larvae.

To accelerate the efforts to achieve universal sanitation coverage and to put focus on sanitation, Shri Narendra Modi, Hon'ble Prime Minister of India launched the Swachh Bharat Mission on 2nd October, 2014. The Mission Coordinator shall be Secretary, Ministry of Drinking Water and Sanitation (MDWS) with two Sub-Missions, the Swachh Bharat Mission - Gramin and the Swachh Bharat Mission - Urban, which aims to achieve Swachh Bharat by 2019, as a tribute to the 150th Birth Anniversary of Mahatma Gandhi. This aims at improving the levels of cleanliness in rural areas through Solid and Liquid Waste Management activities and making Gram Panchayats Open Defecation Free (ODF), clean and sanitised. The Mission shall strive for this by removing the bottlenecks that were hindering the progress, including partial funding for Individual Household Latrines from MGNREGS, and focusing on critical issues affecting outcomes.

Objectives

The specific objectives of the study are

1. Assessment of socio-economic development and health & hygienic conditions of the beneficiaries.
2. Assessment of level of solid and liquid waste management in the Gram Panchayat/ Village.
3. Implementation of sanitation provisions in the anganwadis and schools.

Study Area

Some efforts had been made to study the impact of various schemes and the deficiencies in implementation. The present study contemplates to supplements an implementation and best practices of Swachh Bharat Mission (SBM) to bring about the infrastructural support to the rural people. To begin with, Kalahandi district of Odisha State is chosen as the study area.

The toilet coverage in Kalahandi district and Odisha is ,respectively, 27.84 per cent and 42.44 per cent under Swachh Bharat Mission - Gramin, which is much below the overall national coverage i.e., 67.43 per cent. Only nine out of 310 GPs are Open Defecation Free (ODF) GPs in Kalahandi district as on 13.09.2017. We selected two GPs, i.e., Udepur of

Table 1: Achievement of Swachh Bharat Mission - Gramin wth Respect To District, State & Country

Year	Kalahandi	Odisha	India
2016-17	5,50,22	37,91,004	11,24,23,072
2015-16	22,526	29,26,829	5,27,05,330
2014-15	1953	2595	4,63,839

Methodology

In this study, the data was collected from two sources. Primary data was collected through the process of interview method with the help of a well-structured schedule. The secondary data was collected from the published and unpublished literature, viz., official records of the G.P office, Block office, Govt. publications and annual reports of State Swachh Bharat Mission [SSBM(G)] and District Swachh Bharat Mission [DSBM(G)].

The methodology adopted to collect data and to analyse it:

A three-stage design was adopted for the study with first stage as the Gram Panchayat, the second as the village and the third stage as the household. One GP, i.e., Udepur was selected out of 36 GPs of Bhwanipatna block and one GP i.e., Gadebandh was selected out of 26 GPs of Narla block of Kalahandi district adopting purposive sampling method. Five villages were selected out of seven villages of Udepur GP of Bhawanipatna block, namely, (1) Basumatipur (2) Dangaragada (3) Gopinathpur Alias Gag (4) Janakpur and (5) Udepur. Again, five villages were selected out of seven villages of Gadebandh GP of Narla block, namely (1) Fatkabahali, (2) Gadebandh, (3) Gunupur (4) Ranipata and (5) San Gundri. The list of households who constructed IHHL under Swachh Bharat Mission (G) over the period under study (2014-2017) with their year of construction was obtained for each village within each GP in the block of Bhawanipatna and Narla. A list is prepared on the basis of the resisters (year-wise/village-wise) that are with Panchayat Samiti, Bhawanipatna and Kendrapara. The village and GP sizes are obtained from this updated list. The distribution of the number of IHHL beneficiaries were selected in Udepur and Gadebandh GP of Bhawanipatna and Narla block respectively in shown in Table 2.

Table 2: Distribution of the Number of Sample Beneficiaries Covered under Swachh Bharat Mission (G) during the Year 2014-17 in Kalahandi District

S.No.	Name of Blocks Selected	No. of sample GPs selected	No. of sample Villages selected	No. of sample Beneficiaries
1	Bhawanipatna	1	5	100
2	Narla	1	5	100
	Total	2	10	200

At the second and third stages, the selected sample beneficiaries were randomly drawn from villages of selected GPs of two blocks of Kalahandi district, i.e., 100 sample beneficiaries from five villages of Udepur GP of Bhawanipatna and 100 sample beneficiaries from five villages of Gadebandh GP of Narla block. Thus, two blocks, two GPs, 10 villages and 200 beneficiaries were contacted for the study.

As it is a comprehensive evaluation, two types of data were collected (i.e. Primary and Secondary) at three levels, viz. District, Block and household. The primary data was collected from the field by one schedule for one respondent beneficiary. Altogether 200 respondents were interviewed through these structural schedules. While secondary data regarding target achievements, release of funds etc., were collected from official records of the block/DRDA office, other important data like operational problems are collected by help of intensive discussions with PRI members, field officers and staff. Specific case studies were undertaken in order to ascertain the concreteness and depth of some of the typical quantitative problems affecting the beneficiaries at the micro level during implementation of Swachh Bharat programme at the field level. Therefore, to have a closer look at how the programme operates at the ground level, in-depth interviews were conducted by an experienced investigator. These studies were carried out with a view to seeking clarifications and to enforce the quantitative data collected through well planned schedules. All the three techniques, viz. survey method, personal in-depth interviews and case studies were followed in order to capture the type of information needed in keeping with scope of this evaluation of different aspects of study.

Also, 9 AWCs and 13 schools were selected for implementation of sanitation provisions in two blocks of Kalahandi district shown in Table 3.

Table 3: Distribution of the Number of Selected AWCs/Schools Covered under Swachh Bharat Mission (G) in Kalahandi District

Name of Block	Name of GP	No. of AWCs	No. of Schools	Total
Bhawanipatna	Udepur	4	5	9
Narla	Gadebandh	5	8	13
	Total	9	13	22

Findings

The major observations and findings of the study are as follows:

- A higher percentage of the respondents (40.5 per cent) belong to OCs; 34 per cent and r25.5 per cent belong to ST and SC categories among the selected respondents of Swachh Bharat Mission - Gramin schemes.
- The distribution of the respondents in two blocks indicates that majority were in the age group of 40-59 years, i.e., 47.5 per cent of the total respondents. The highest per cent (39) of the respondents belong to younger age group of 19-39 years in Narla block, and 26 per cent respondents belong the age group of 60 years & above.
- The study reveals that 7.5 per cent of the respondents were females and 92.5 per cent were males.

- As per the investigation, 45.5 per cent of the IHHL beneficiaries have been benefited from Swachh Bharat Mission - Gramin schemes as their annual income is more than Rs. 24000 per household.
- Again, 34.5 per cent of the beneficiaries are marginally benefited from the scheme. Their income level is low; the annual income of these beneficiaries is Rs.12,000 to Rs.23,999. Also 20.0 per cent of the beneficiaries are slightly benefited from the scheme.
- 94.5 per cent of IHHL beneficiaries were reported to use drinking water from tube well whereas 4.0 per cent from pipe water & 1.5 per cent from well.
- Basic amenities like electricity is essential for dignified living. Out of the total number of respondents, 89.0 per cent were reported to consume electricity and 11.0 per cent beneficiaries were not consuming electricity in both the blocks.
- It is observed that 95.0 per cent of the respondents of the sample population of the study were reported to use toilets for all members of the households while 5.0 per cent reported that all members of the households do not use it. Also, 95.0 per cent sample beneficiaries are not using the open field.
- 85.5 per cent of the beneficiaries wash their hands before meals and 15.5 per cent beneficiaries do not follow this practice. Again, 95.5 per cent of the beneficiaries wash their hands with soap after defecation and 5.5 per cent beneficiaries do not follow it.
- Regarding distribution of beneficiaries in the blocks with respect to management of solid and liquid waste materials, 98.0 per cent beneficiaries have disposed their wastes in proper place. Also, 57 per cent beneficiaries have constructed drainage facility in their houses.
- 84.0 per cent beneficiaries properly disposed of used water in their houses. Again, 98.5 per cent beneficiaries have cleaned roads, open areas, etc., in their own houses.
- It has been observed that 90.5 per cent of the total beneficiaries were participating in Gram Sabha meeting on sanitation programme at Gram Panchayat level. In Bhawanipatna and Narla blocks, 100 per cent and 81.0 per cent of beneficiaries were, respectively, participating in Gram Sabha meeting. Overall data indicated that the beneficiaries are more aware of sanitation.
- The sanitation and hygiene facilities of the students of 22 AWCs/schools of two blocks were enquired. It was observed that 86.4 per cent AWCs/schools have toilets for boys and girls while 13.6 per cent AWCs/schools do not have toilets for boys and girls. A majority of (86.4 per cent) toilets are functioning properly and 13.6 per cent toilets are not operating properly.
- Again, 95.5 per cent of AWCs/schools have drinking water facility whereas 4.5 per cent of AWCs/schools do not have the facility. As water is one of the basic necessities of life, it must be ensured at all AWCs/schools.

The study specified that the Swachh Bharat Mission - Gramin has a positive impact on the beneficiaries. It is observed that SBM is a unique programme with has different scope and scale than any other sanitation initiatives in the State/district.

Conclusions

On the basis of the findings of the study, the following recommendations are put forth to improve the performance of the Swachh Bharat programme:

- Awareness should be developed among the rural people on 100 per cent use of toilets.
- All rural schools be provided water, sanitation and hand washing facilities.
- Toilet facilities should be arranged in all anganwadis.
- Regular monitoring of construction and usage of sanitation facilities.
- Convergence with Mahatma Gandhi NREGS to facilitate rural households with fund availability for creating their own sanitation facilities.
- Sanitation related issues should br discussed regularly in Gram Panchayat & Gram Sabha.

Along with sanitation, good hygiene is an important barrier to many diseases. Better results in health and community development can be achieved by coordinating water supply, sanitation, nutrition and improvement of livelihoods.

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National Institute of Rural Development and Panchayati Raj (NIRDPR) continuously strives to serve the nation through research, training, action research and consultancy activities for development of the rural poor and enhance their quality of life. It aims to:

1. Organise training programmes, conferences, seminars and workshops for senior-level development managers, elected representatives, bankers, NGOs and other stakeholders;
2. Undertake, aid, promote and coordinate research on its own and/or collaborate with State, national and international development agencies;
3. Analyse and offer solutions to problems encountered in the planning and implementation of the programmes for rural development, decentralised governance, panchayati raj and related programmes;
4. Study the functioning of the Panchayati Raj Institutions (PRIs) and rural development programmes across the States;
5. Analyse and propose solutions to problems in planning and implementation of the programmes for rural development; and
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