

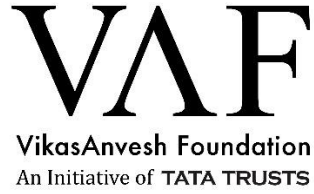
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VikasAnvesh Foundation
An Initiative of TATA TRUSTS

CONFERENCE ON RURAL INDIA TOWARDS INCLUSION OF THE MARGINALISED

DATE: 7TH TO 9TH NOVEMBER 2019
VENUE: BAIF CAMPUS, PUNE

The background features a central graphic of a line of people holding hands, forming a semi-circle. There are also silhouettes of a horse in the top left, a donkey in the top right, and a person running in the bottom left. The entire page is framed by a decorative border of white dots.



Conference on Rural India: Towards Inclusion of the Marginalised

Compendium of Abstracts

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Common pool resources and rural livelihoods

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Under-representation of Muslims in Higher Education

Samaritan Help Mission, Tikiapara, Kolkata, Bharatiya Muslim Mahila Andolan, Muslim Satyashodhak Samaj, Anjuman Kjhairul Islam's Poona College, F D Arts and Commerce College for women, Ahmedabad, Ahmedabad Muslim Women Association AMWA,

Rainbow Session

Tata Institute of Social Sciences, Public Health Foundation of India, Tata Metaliks, BAIF Development Research Foundation, Society for Rural and Urban Joint Activities

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COMMON POOL RESOURCES AND RURAL LIVELIHOODS



Trends in The Contribution of Commons-Based Livelihoods to Economies of Rural Households

Concept Note

Problem statement

Common pool resources (CPR) play a significant role in the lives of the rural poor in India. The definition and conceptualisation of commons differ widely among the community, government systems, legal system and other involved stakeholders. Access and usage rights for CPRs lie with the community and the current CPR regimes in the country focus on community-based management and governance of these resources. Given the context of changing rural landscape, the status of CPRs in rural areas is also changing and with similar effects on the dependence of the households. As land area under CPR is continuously decreasing, the dynamics between access to CPRs and usage of resources as well as institutional mechanisms are also in flux.

Under the decentralisation governance of CPRs, the access and user rights for CPRs have been defined by the community with government systems playing a role in the conservation of CPRs and also as a facilitator of community access to CPRs through individual and community forest rights. At the community level, the access/user rights may have been formed on basis of class-caste hierarchies and other similar social structures. Similarly, presence of non-government organisations in the CPR ecosystem also play a certain role in facilitating the access for various activities and management for conservation.

The proposed research aims to assess the changes in dependence on CPRs of the rural community for livelihood activities and the factors driving these changes. The study also focuses on understanding the current regime of CPR, its access, management and governance systems with the perspective of the rural community. The trends in accessing and using CPRs for livelihood activities will provide insights devising strategies of promoting livelihoods with better management and conservation of common-pool resources.

Research Objectives

- To assess the current status and access/usage rights on CPRs
- To assess trends in dependence of CPRs in the livelihood basket of the households over the years, and the factors driving these changes
- To identify institutions in place for CPR management and governance and assess their role in livelihood security of households

Sampling Plan

Population characteristics

The sample population for this study will focus on the central and eastern states of the country. The population will primarily comprise of households that are/were dependent CPRs in multiple ways. Panchayat and block level officials, as well as NGOs working in this space, will also be a part of the sample population. The sample will be collected from multiple locations across the country.

Size of Sample

The study aims to cover four to five villages in one district. In each of the village, community interaction through focus group discussion and survey of 30-35 households will be conducted. Thus, for each location (i.e. one district in each state) 120-150 households will be covered as a sample for the study. The villages will be selected on basis of the parameters designed for the study.

Data collection

Sample household-level survey will be the primary tool for data collection along with focus group discussions at community level for qualitative aspects of the study. In each village, minimum one FGD will be conducted, comprising of both men and women as the participants. If a common FGD cannot be conducted, two FGDs with only men and only women as respondents will be conducted. Also, key informant interviews and interactions with panchayat level officials, NGO personnel, forest department official and others will be done for collecting data around knowledge systems related to access, management and governance related to CPRs. Secondary data collection from existing surveys and records will also be done. Along with the household survey and FGD, case study of locations focussing of best practices/model intervention/incidences of high degradation and similar issues will also be prepared.

Data analysis plan

The data analysis will be done using software such as MS-EXCEL and SPSS against the indicators collected during the survey. Descriptive analysis and inferential analysis will be conducted against the data collected.

Expected outcomes

The study aims to find the trends in dependence of CPRs in livelihood basket of rural households and the driving factors behind these changes. Also, the 'before-after' analysis will characterise the nature of changes happening in CPRs and will give insights for action, advocacy and policy implications for CPR access, usage and conservation. Additionally, the study outcome will provide a repository of concepts and knowledge system pertaining to CPRs along with case studies on efficient models on CPR access, usage and management

Abstracts

Study on the contribution of commons-based livelihoods to economies of rural household in diara kshetras in Kosi river basin in Saharsa district

Megh Pyne Abhiyan

The northeast alluvial plains of Bihar comprise primarily of *diara kshetra* in the flood plains of the Kosi, Mahananda, Ganga and their tributaries. The word '*diara*' comes from '*dia*', which means 'earthen lamp,' i.e. bowl-like land system on either side of the river. *Diara kshetra* is defined as the area which is adjacent to or surrounded by perennial river and is subject to the alluvial action of that river. Such areas lie between natural valleys and submerge for varying periods and erode from time to time due to changes in riverbeds, braiding and river flows. Large parts of the rural population especially those living in the *diara kshetra* of northeast alluvial plains of Bihar, are particularly exposed to widespread floods and waterlogging in pockets, riverbank erosion, high speed winds (high damage risk zone), earthquake zone V and IV (very high and high damage risk zones), shallow groundwater table (up to 5 meters) and the changing landscape. *Diara kshetra* is also marked by its inaccessibility to and from the habitations and development interventions in the region are not concurrent because of the flood proneness leading to several vulnerabilities. Located in this context, the objective of the study was to determine the diverse commons and their presence across the study area with focus on access and use for local livelihoods. This study has been carried out in Saharsa district over four-gram panchayats - Sattaur, Arapatti, Birgaon and Telaba Pashchim. The critical approach adopted for information generation in the entire study has been that of purposive and snowball sampling methods and use of tools such as semi-structured and structured guides.

The study identified different forms of commons in the *diara kshetra*. For instance, *chaap* (land inundated with floodwater, throughout the year with varying levels), *kharhoir* (jungle of wild grass), river, and *pokhar* (village pond). *Chaaps* are mostly created during extreme flood events in and are on private agricultural lands owned by local residents. Rabi is the only cropping season where the land is used for growing maize and wheat, only if the water recedes, otherwise the land remains underwater, rendering it useless. Expanse of *chaaps* vary across panchayats. Sedimentation has changed the landscape and impeded agricultural productivity. Whereas, the area of *kharhoir* in few panchayats has increased by more than double in recent times. This indicates that the productive agricultural land has been converted into wasteland wherein the majority of the area is *kharhoir*, and agriculture is practiced in a small portion. Sedimentation and erosion has also changed the nature of commons, vis-à-vis their physical existence. In one panchayat, river is the now the only shared resource. Due to sedimentation, the expanse of the *chaap* in the panchayat has reduced substantially and is now a mere low-lying land that gets waterlogged when it rains or floods. Erosion by the western flow of the Kosi has reduced the area under *kharhoir* by half in a panchayat, and the remaining half has slowly been encroached by people for making fit for agriculture.

The status of these resources as commons differ based on (i) Access to public property without any permission, (ii) Private land being considered as commons for few months in a year without permission and (iii) Private resource being considered as commons because of its use for a collective good. The study also found that the benefits of the access and use of the commons vary between household consumption, livelihood support and community work such as water for irrigation, financial resources for organising village level celebrations respectively.

The use and benefits of commons are relatively notable at household consumption. The varying size of and access to the commons, the impact of sedimentation on agricultural lands, restricted local livelihood opportunities and uncontrolled migration, in areas habited by diverse socio-economic groups have created a complex mesh of interactions between commons and livelihoods. Therefore, a need to explore the interlinkages between these factors for deciphering varying measures for local livelihoods from short-term and long-term perspectives.

Trends in the contribution of commons-pool resources-based livelihoods to economies of rural household in Badwani district, Madhya Pradesh

Kalpesh Kumar, Microsave Consultants and Shashank Deora, VikasAnvesh Foundation

Barwani district in western Madhya Pradesh has a significant common land area (wasteland) devoid of any vegetation, but grasses and shrubs. The region is crossed by river Narmada and few of its tributaries. These two resources have traditionally played a significant role in the lives of the rural populace of Barwani. A significant contribution of the CPR to the traditional rural Indian economy is also widely acknowledged in the literature. However, since the economic policy changes in the country in the early 1990s, the economic environment has changed leading to changes in the livelihood portfolio of the rural population.

It is in the above context that the current research assesses the change in the contribution of CPRs (land, water and forest) to the rural livelihood in Barwani – identifying factors responsible for these changes. It also attempts to understand the existing management regime and the associated bundles of rights with these resource systems. The study area for this research comprised of four villages from Pati administrative block of Barwani. A survey was carried out with 82 households, along with four focus group discussions, to record the data and qualitative information.

The research findings reveal that livestock ownership, a crucial livelihood in the study area – both large and small ruminants, reared for dairy and meat selling respectively – has been continuously declining for at least a decade. Reasons for this decline have been identified as the insufficient fodder availability due to increased pressure on these low fertility lands, along with the diversion of some of these land patches for the development infrastructures such as schools. Although the forest land in the region mostly consists of shrubs, people are dependent on it for the sale of a few minor forest products (MFP) such as the seeds *Cassia tora* plant along with fodder and fuelwood. However, this dependence has also reduced for all the surveyed households, partly due to increased pressure on the forest leading to a decline in the availability of MFPs and partly due to a reduced interest of the local traders in these MFPs. It has adversely impacted the livelihoods of the households dependent on these MFPs for their livelihoods.

Another crucial factor responsible for the declining dependence on these CPRs for livelihood generation is the growing dependence on alternate livelihoods, namely agriculture and seasonal migration. Income from these two livelihoods has increased for a majority of the households dependent on these. Growing dependence on agriculture has led to increased use of groundwater, another common pool resource. Changes in the dependence on the surface water sources have been mixed, declining for a majority of the households, but increasing for the households able to pump this water for irrigation.

In none of the four villages, any management regime has been fixed by the community to manage and conserve these resources. In forest villages, though the joint forest management committee has been formed with the help of the forest department, community members are primarily not involved in their decision-making process.

Rejuvenating Forest-Farm Ecosystem Through the Inter-Generational Exchange of Knowledge

Saurabh Singh, Parijat Ghosh, Dibyendu Chaudhuri, Azim Premji University and PRADAN

The small and marginal farmers, especially from the indigenous community, living in the forest fringe areas, have been depending on both forest and land for their livelihoods. They get food, fodder, fuel, medicines from their forest, but with time, due to many reasons, depletion of natural resources has happened and the forests have suffered much. Farmers also began accessing market for their daily requirements which they were earlier getting from forest. In the process, they started gradually forgetting their age-old knowledge of forest and forest-farm ecosystem which affected not only availability of the forest products but also fertility of their land. The Adaptive Skilling Action Research (ASAR) has been initiated with Indigenous communities in three villages in India in collaboration with Azim Premji University and PRADAN to find out ways through which villagers may take interest to save their forest and rejuvenate forest-farm ecosystem. The younger generation at Jharna Ghughri village of Dindori district in Madhya Pradesh is ignorant about the plants available in their village and the nearby forest. Whereas, according to the older people in the village these plants were meeting most of their daily needs. This ignorance of the younger generation is resulting in illegal felling of timbers as well as disappearance of other useful trees and herbs. An attempt to involve children and youth to learn about their forest is made by this Action Research in Jharna Ghugri village assuming that it would generate interest to save their forest. Older people have engaged with them to walk around their village and forest in order to understand the forest, the useful species and the ecology around. Through this action research they are engaged in making a biodiversity register which has all the information about the plants and its uses. They intend to keep that in the local school and from there spread it to other schools in the block. This entire process has resulted in coming together of two neighbouring villages with Jharna-Ghughri to protect their forest. Villagers from each of those villages took responsibility to protect some part of the forest. They started guarding different parts of the forest to stop illegal felling. People from all the adjacent villages got the message that villagers of Jharna-Ghughri and their neighbours had stood against illegal felling. This paper is an attempt to share the journey of the villagers about saving the forest and increasing biodiversity and how the younger generation of villagers got interested in that. The paper will also talk about the children's excitement and understanding of these processes.

Evolving a methodology to prepare a People's Commons' Register (PCR)

Shashank Deora, VikasAnvesh Foundation

Common pool resources contribute significantly to the livelihood of rural communities in India. However, the evidences of degradation in the extent of these resources, as suggested by multiple studies, have led scholars to predict scenarios of the likes of *The Tragedy of the Commons*. Elinor Ostrom's research demonstrated that the self-organised collective action by the users of a resource has the potential to manage the common pool resources sustainably. Literature also suggests multiple examples of successful governance of the common pool resources by the traditional management and conservation norms (*de facto* norms). Communities dependent upon these resources also possess a certain knowledge around these resources, acquired through long-standing access, usage and management practices. However, the absence of a legal recognition (*de jure* norms) of these customary regimes has led to the implementation of the alternative mechanisms. A need to strengthen the existing customary practices has also been identified as a major requirement to ensure the sustainability of the common pool resources. It is impeded by the absence of a reliable and comprehensive database of the existing and customary practices and norms related to these resources leaving communities disempowered during conflicts around a resource.

Under the above context, the current research attempts to develop a methodology to prepare a reliable and comprehensive database of the existing practices and norms related to the common pool resources. The common pool resources considered for this study include the natural resources – land, water and forest – and the infrastructure held as the common pool resources by the community. This research employs the *bundles of rights* approach to record the different rights possessed by different users of a common-pool resource.

The study area for this research falls in the three administrative blocks of Madhya Pradesh and Chhattisgarh, namely, Bichhiya (Mandla), Khaknar (Burhanpur) and Darbha (Bastar). This research is covering a cluster of contiguous villages, total 57 in three blocks, mostly within a single milli-watershed covering an area of 8000 to 10000 hectare. Data for this research is being collected via participatory exercises, focused group discussions and the GPS based mapping of resources.

The two broad research outcomes are as follows –

1. Research report detailing a framework and a broad methodology to prepare PCR
2. PCRs for the study villages

Trends in The Contribution of Commons-Based Livelihoods to Economies of Rural Households in Bastar District of Chhattisgarh

Gyanesh Nanore, VikasAnvesh Foundation

Common pool resources (CPR) play a significant role in the lives of the rural poor in India. However, the changing economic environment in rural areas, driven by a multitude of factors, has the potential to affect the contribution of these CPRs. Under this context, the current research assesses the changes in dependence of the rural community on forests for livelihood activities and the factors driving these changes.

The research was carried out in Bastar district, which lies in the south-western part of Chhattisgarh. The study area for this research comprises of eight villages from Darbha and Tokapal administrative blocks of Bastar. Scheduled tribes, mostly Bison-horn Maria and Dhurwa tribes, are the primary inhabitants of the study area. While agriculture is the primary livelihood, forests contribute significantly to the livelihoods. Data was collected from 64 households using a questionnaire, along with eight focus group discussions, to record the data on the changing uses of forests and the factors responsible.

For analysis, the study villages have been classified into three category – remotely connected, moderately connected, well connected. The study reveals that as one moves away from the highway, the dependency on forest resources increases. With time, the forest just remains vital for them for customs and rituals for the well-connected villages. The quality and spread of forest have not changed much during the last decade as perceived by the community. However, seasonal migration has come up as a new livelihood option for people living in moderately connected villages. For all villages, except those remotely connected, better returns from local labour opportunities and relatively higher migration remittances have led to the loss of significance of forest as a livelihood source.

Trends in the contribution of commons-based livelihoods to economies of rural household in Araria District, Bihar

Ashish Ranjan Jha, Jan Jagran Shakti Sangathan

The study focused on exploring the richness of common property resources trends in its availability, usage and its quality, its linkage to rural livelihoods and nature of its management in Araria district of Bihar.

The study was conducted in four panchayats of Araria. Qualitative and quantitative instruments were used to capture data at the household level and community level, using individual interviews and focus group discussion, respectively. One hundred twenty households were covered from the four panchayats. Four focused group discussions at panchayat level were conducted with the participation of thirty people in each, with the focus on status, access and dependence on CPR. The selection of the panchayats was based on interviews with community members of 20 panchayats focusing on parameters such as diversity of CPR and location of Panchayat, i.e. accessibility from market, district/block headquarter, availability of metaled roads.

The study findings highlight the degradation of CPR in all the Panchayats. Availability of CPR has reduced due to government policies, encroachment, control of CPR by influential individual families. Respondents in all the sample panchayats reported some struggle related to access/usage of CPR with the government or within the community. In none of the sample, Panchayats households exclusively depended on the CPR for livelihood. However, communities do value CPR and derive benefit from these resources. CPR helps them with better nutrition and income through cattle rearing, fishing, fuelwood. There seems to be lack of clarity at the community level about the legal status of these resources, i.e. which of the resources are government-owned and which are community-owned. In Aamgachi panchayat, lease of ponds has been given to a member who is not the resident of that panchayat.

Forest, like CPR, has been restricted to access for fuelwood and grazing by the forest department. However, it has given a contract for harvesting "*Kasal*" (elephant grass used for roofing) to specific individuals. They, in turn, illegally hand out grazing rights to communities. In case of rivers, in some places where the adjoining land is owned by individual landlords, access is restricted, or they charge fees for its usage from communities who are engaged in fishing. In one panchayat people reported that they had received the fishing right from fisheries department.

Governance and management of these CPRs are not community-driven. Cooperatives have been formed for the management of the ponds, but community members have the least participation in these cooperative societies. Extraction from these ponds hence is driven by the influential households, thereby having an impact on the poor and marginalised community of the villages. Though the communities are not solely dependent on these resources for their livelihoods but the resources provide a supplement to the livelihood activities. Lack of community-centric approaches to CPR in the study villages are excluding the most marginalised households and thus affecting their lives and livelihoods.

Dependencies, vulnerabilities and changing practices of groundwater access and use for agriculture: some lessons from Maharashtra

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ACWADAM

Groundwater is the mainstay of Indian agriculture. More than 65 per cent irrigated agriculture is dependent on groundwater across the various hydrogeological regimes in the country. With more than 29 million groundwater sources abstracting water for agricultural purposes, this is indeed a tale not unfolding anywhere else. This overarching groundwater resource has posed the challenges linked to groundwater overexploitation and subsequent depletion. It has also caused problems of groundwater quality in many regions of the country, especially in the form of high TDS, fluoride, iron and arsenic contamination. Groundwater is a common pool resource and is hence its non-excludability makes it vulnerable to deterioration and depletion. As our rural landscapes approach towards this tragedy of commons, communities are facing increasing challenges to sustain the very rural livelihoods that prospered under the regime of relatively easy access to groundwater. Another fallout of this crisis is the drinking water insecurity especially in the drought-prone regions of the country.

The situation is no different when it comes to the state of Maharashtra. There are nearly 2.5 million groundwater sources used for agriculture. Across 1531 watersheds in the state, nearly 76 are overexploited. ACWADAM as a part of a programme on strengthening institutional arrangement for groundwater management in overexploited watersheds across three districts of Maharashtra undertook a survey to understand:

- a. Dependency on groundwater and its relation to agriculture
- b. Vulnerabilities emerging due to groundwater depletion and recurrent drought situation
- c. Changing practices of groundwater access and use

Through an intensive survey across 11 villages in Latur, Osmanabad and Pune districts of Maharashtra it was observed that there is indeed an overarching depend across groundwater for irrigation; thus, sustaining agricultural livelihoods. Over the years this dependency is changing and is represented through development of newer sources, tapping multiple aquifers and changing ownership patterns of groundwater sources. With recurrent drought and episodes of erratic rainfall patterns there is an increasing vulnerability especially with regards to drinking water security. In agricultural context, these vulnerabilities are often highlighted through failing groundwater sources, drying up dug-wells, crop failures and resultant change of practices. The survey highlighted the changing practices of groundwater use and access and how they shape rural livelihoods. People reported increasing use of protective irrigation for Kharif crops during monsoonal dry spells, inter-aquifer water transfers due to depleting shallow aquifers as some of the emergent practices.

The state, as well as other agencies, are addressing the challenges of groundwater management, especially in the context of changing cropping patterns, erratic rainfall and recurrent droughts. However, it is observed that communities have already started adapting to the changing scenarios they find themselves in. A systematic analysis and integration of these practices and its linkages to rural livelihood security will be critical to arrive at policies and programme that aim to addresses these challenges especially those linked to groundwater.

Trends in the contribution of commons-pool resources-based livelihoods to economies of rural household in Palghar district, Maharashtra

Archana Chandola and Shashank Deora, VikasAnvesh Foundation

To characterise the dependence of livelihoods of rural households on common-pool resources, this exploratory study was conducted in four villages of Palghar district of Maharashtra. The methods involved in the study were quantitative at the household level and qualitative at the community/village level. Four focus group discussions with 20 participants in each and 25 individual households were covered as the sample for the study. The population covered in four villages is dominantly tribal belonging to the Warli tribe. The sample population is engaged in agriculture, which is rain-fed and has no other source for irrigation, and is the primary occupation for the households. Migrant labour has emerged as a dominant secondary occupation for the households in the last 15 years, the proximity of Palghar to industrial areas of Vasai etc being the primary reason. Households have experienced changes in the last ten years in terms of increased income from labour activities, and forest land converted for farming, poultry and goat rearing. These villages are primarily forest villages and have been dependent on the forest for fuelwood and fodder. Three out of the four villages have no LPG connection and fuelwood is the primary source for cooking. The fourth village of Welinchapada has converted the entire forest area into private farmland. The community has traditional rights to access the forests, and in two villages, with the support of an NGO, forest rights have been granted and a “Van Hakh Samiti” has been constituted. Community participation in conservation and management is present in these two villages where on rotation basis, from each household, one member takes part. The study found that for forest as a resource system, availability of extracted units has reduced in last ten years. The households were engaged in barter of the collected minor forest products (MFP) for dry ration made available by the local traders at the market. The decreased availability of MFPs is primarily due to the depleted forest resource, and even the households have reduced the collection of MFPs. The needs of the households are getting fulfilled by availability of other sources of income, which in this case, is the migrant labour. The households prefer to work as migrant labours than to collect MFPs, which now they find as ‘intensive and tiring’ activity. The depletion of the forest has also affected the water resources in the villages with increased use of handpumps and private borewells. The relevance of common-pool resources in the study area can only be found for accessing fuelwood and shifting livelihood to migrant labour is one of the driving factors for changing dependence on common-pool resources.

The Lodhas of Singdhui, Jhargram, West Bengal: A case study of “maladjusted” livelihoods

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Historically, Jangal Mahals became a ‘zone of the anomaly’ through the failure of development policies. Till date this region comprising of districts such as Birbhum, Bankura, West and East Midnapore and Jhargram districts in West Bengal have a very low development index in the whole nation. Even though the administration of the forests have changed hands from the British colonial administration to the Indian government and much has changed in terms of new laws to regulate the forests while drastic changes have manifested in the cultural patterns of the tribes directly dependant on the jungles for survival and livelihood, the paradigmatic conception of forest as state property has not changed amongst the stakeholders on ground. This paper explores the gap that exists between the state’s understanding of what should constitute as forest commons and the Lodha community’s conception of resources which they approach as their “commons”. The Lodhas is classified as a Particularly Vulnerable Tribal Group and fare poorly in almost all aspects of development parameters. This paper emerges from a Participatory Action Research conducted in eight months with 45 households of Singdhui village, during which the researcher stayed inside the village and outside the village, interacting with a range of stakeholders concerning the forest’s importance in the Lodha’s livelihood. This paper illustrates the dynamics of the state and community relationship from the ground-up. This paper focuses on the difficulties and challenges of a forest-dwelling community, the Lodhas pertaining to their livelihood risks and options. Forests are an essential resource for livelihood because most households are landless or have non-irrigable land. The dependence on forest is also derived from cultural patterns of the Lodhas who do not prefer agriculture even though surrounded by other communities such as Santhals and Mahatos who are part of the agrarian rural economy. While the livelihood practices of the Lodha such as collection of Minor Forest Produce for household consumption and sale is permissible by the state laws, other livelihood practices such as quarrying of stones and tree-felling are illegal and potentially damaging to the ecosystem of the area. The Lodhas challenge the state’s monopoly over the Sal timber and resources such as the stones because the dominant perception in the village is that the forests are a form of “commons”. The distinction between village forest, protected forests and reserved forests do not exist for the Lodha community and despite recourse to penalty by the Forest Department and other punitive measures, the afforestation programs or the Joint-Forest Management programs do not attract much participation from the community as these are long term investments which the community doesn’t want to pursue. This paper explores the livelihood options available to the community to explore interventions that can be designed for a secure tomorrow.

Diversified Livelihood Strategy as Sustainable Income for Tribal Communities

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Over the next few years, climate change is expected to have a drastic effect on all human activities. Individuals at the bottom of the pyramid are exposed to climatic hazards due to lack of sustainable livelihoods that can absorb such extraneous shocks. The focus of this study is to look at the linkages between CPRs and rural livelihoods in the context of sustainability, forest rights and most importantly, climate change.

The study is guided by the Sustainable Livelihood Framework (SLF) developed by DFID. Data was collected from two settlements inside the Annamalai Tiger Reserve, namely Kodanthur (comprising 110 households) and Thalinji (comprising 94 households). The data collected at the household level focused on the age; income generation across various livelihood options such as agriculture, NTFP, etc.; livestock possession and any skillset acquisition that is not being exploited for livelihood generation. This was followed by a Focus Group Discussion (FGD) to investigate Agriculture and NTFP as livelihood options and to value the sustainability potential of each of the “capitals” in the SLF. A profile of each settlement was made, and analysis was done to decide the livelihood mix that would help diversify the income base and smoothen the consumption function.

In both the settlements, the 0-12, 13-17, and 18-22-years segment combined is a group that would in the future be part of the then-available livelihood mix in the settlements. In both the settlements agriculture and NTFP collection is mostly practised by the 36-50 age group and is not taken up by the very young 0-12 years segment or the very old >60 years segment. In Kodanthur, all NTFP activities have reasonable participation rates except honey collection. However, the participation rates in Thalinji, of various NTFP options such as Amla (17%), Honey (36%), Wild Mango (33%), Ziziphus (4%) and Broom Grass (24%), are much lower than potential participation rates.

By using the DFID Sustainable Livelihoods Framework, the analysis was able to conclusively show that though the two settlements were in the same geographical region, the livelihood strategy was not sustainable. In Kodanthur settlement, the restriction of one-acre landholding has prevented the creation of a landed class, and therefore over time the members of the settlement decided to use the other form of natural capital available to them – forest wealth. However, in Thalinji settlement, due to the absence of such a restriction, a landed class emerged, and the settlement focused on agriculture as a viable long-term option given that the cost is lower than NTFP collection. Both settlements are currently facing the brunt of reduced rains, and the lack of livelihood options is making it difficult for these settlements to manage the risks associated with failed crops and reduced NTFP productivity. It is in this context that a strategy of Ecotourism is proposed that could help households diversify their income sources to mitigate the risks of agro-heavy income stream as a result of climate change-based rainfall unpredictability.

Lives, Livelihoods, and Common-Pool Resources in the *Char* areas in Assam – Observations from An Exploratory study

Nirmalya Choudhury, VikasAnvesh Foundation

The Brahmaputra river basin in Assam is dotted with numerous sand bars (or river islands) that are an outcome of the fluvial dynamics of the river. In local parlance, the sand bars are referred to as *char* or *chaporis*. As per official nomenclature, the *char* or *chaporis* include sand bars within the Brahmaputra river channel and the area formed by the deposition of river sediments adjoining the riverbank up to the nearest embankments. The origin of the sand bars is intrinsically linked to the nature of the river channel (braiding), gradient, and the sediment load carried by the river channel. The deposition of the sediments carried by the river channel over a period of time leads to the formation of the *chars*. These sand bars/*char*/*chaporis* are prone to recurrent floods and bank erosion. By its very nature, the land, which in some sense lies at the margin of the (main)land and aquatic ecosystem is in the transient, and subject to a periodic emergence-submergence-re-emergence cycle.

These *chars*, seen as wastelands, have witnessed human settlement for nearly a century. Despite the long history of human settlement on these hazard-prone areas, there is a paucity of literature on understanding the various dimensions of life and livelihoods of the *char* dwellers. Existing literature on the *chars* and *diaras* indicate that the transient nature of the (land) resource, leaves an imprint on the life and livelihoods of the people living in *char* lands, who tend to remain marginal within the mainstream development discourse. It is in this context that a rapid exploratory study was undertaken with the overall objective of a preliminary characterisation of the life and livelihoods of the *char* dwellers, with a specific focus on the existence and dependence on common-pool resources.

The exploratory study was undertaken in six districts of Assam (Dhemaji, Lakhimpur, Majuli, Darrang, Dhubri and South Salmara) and across 13 *chars* during July-August 2019. Qualitative tools like focus group discussions (13), unstructured interviews (12), and participatory observations were used by the author during the fieldwork. Given the exploratory nature of the study, the choice of the districts, the *chars*, and the respondents was undertaken based on a mix of purposive, key informants, and snowball sampling.

The *chars*, whether adjoining the river bank or mid-channel sand bars, have two characteristics: remoteness and recurrent exposure to riverbank erosion. The former affects access to life services like education and health facilities. The latter (riverbank erosion) is often the reason behind settlement in such remote areas. In some areas, the change of the course of the river has resulted in the mainland getting converted into *char* land. Though a large part of a *char* could come under seasonal (post-monsoon) cultivation, and/or be used for grazing, the tenurial security and the associated property rights vary across the study locations. Apart from the two districts in lower Assam (Dhubri and South Salmara), long-term land tenurial security is absent, and the property rights remain unclear. Often *de jure* (as mandated by the property rights associated with a piece of land) and *de facto* (how the piece of land is used) property rights over land diverge. Unclear property rights over land in some location results in competing for land use and conflict, while in other locations also result in particular collective action in the form of collective farming. *Chars* are surrounded and often partially submerged with the river. Periodic submergence often results in the formation of *beels*. The rivers and *beels* are common-pool resource systems. Capture fisheries from these systems is an integral part of the

(subsistence-oriented) livelihood-scape of *char* dwellers. Property rights pertaining to capture fisheries have moved away from open access to a more regulated regime. However, authorised users, in practice, follow a broader interpretation of their *de jure* rights based on the nature of the use of these fisheries (commercial vis-a-vis self-consumption).

Although access to clean energy for fuel has increased, an overwhelmingly large proportion of the *char* dwellers continue to depend on the rivers and the *char* lands for fuelwood. Overall, the dependence on common-pool resources seems to decline as one move down the *chars* in the less population dense upper Assam districts to more population dense *chars* of lower Assam.

Trends in the contribution of Common-pool resources-based livelihoods to economies of Nand Gawali communities in Wardha district, Maharashtra

Rashmi Komal, VikasAnvesh Foundation

The forest forms a significant Common Pool Resource (CPR) for Nand Gawali communities in Wardha district of Maharashtra. Nand Gawalis are traditional pastoral communities who possess large numbers of livestock and heavily depend on the grazing lands in the forest. They also migrate to villages with fodder and water situated along the Wardha river for 3-4 months every year.

The exploratory study was undertaken to understand the change in the access and usage of forest grazing land. It also becomes beneficial to explore the trends in dependence of CPR and how it affects the livelihood patterns of these communities. Five villages situated in the transition and buffer zone of the forest were chosen. Survey of 29 households was conducted along with focus group discussions at the community level. Apart from Nand Gawalis, the sample population also included few Adivasi and Banjara households. The leading economy in the region is pastoral while agriculture contributes further to the livelihood.

Despite their valuable contributions, the declining and degrading grassland, along with many other factors, pose a threat to the traditional livestock rearing practice of these communities. The age-old practice of seasonal migration for fodder is changing rapidly for Nand Gawalis. The custom of farmers paying these pastoralists to graze on their farmland has also disappeared. Under the Forest Rights Act, in 2005, more than 500 Ha of the area was incorporated under Forest shrinking the grazing lands. People have received licenses to graze their cattle. Due to the absence of community or forest management efforts to conserve the grazing lands, invasive species are widespread, resulting in fewer palatable grass available for the animals. The dependence of people on the forest has decreased because of many intertwined factors. Of the many reasons, the decrease in the number of livestock and tightening of the government policies for Forest appear to be the latest causal factors. Understanding the trends in access and usage of CPR can help in devising means to conserve traditional livelihood practices for these communities.

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SCALING UP OF SUSTAINABLE AGRICULTURE



Challenges in scaling up of sustainable farming practices

Concept Note

Since the last two decades, on one side, volatile commodity prices and increasing cost of cultivation has put the livelihood of marginal and small-scale farmers under threat. On the other side, growing awareness about the ill effects of chemical use in agriculture, interest in alternate methods, low on chemical use, of farming has been increasing in India and around the world. There has been an increasing stress on resource management and soil health. Additionally, climate change has brought back the attention towards the agro-ecology, its stability and resilience. More and more state governments are initiating agricultural schemes and programs focusing on agro-ecological and sustainable farming practices. In spite of decades of work by various non-governmental organizations, most of these initiatives have either stagnated or sometimes fallen out. The objective of this theme is to understand the challenges faced by farmers that restricts the scaling up of sustainable farming practices.

A spectrum of technological choices is available for farming with each technology having its own merits. Farmers adopt various farming practices with different principles and ideas. For the purpose of this study, we define “sustainable farming practice” as the package of practice that would involve any of the following aspects

1. Increase in organic inputs to the farm and/or decrease in fossil fuel-based inputs
2. Increase in water/nutrient use efficiency
3. Increase in farm/agro-ecological stability and resilience
4. Decrease various risks involved in farming for the farmers
5. Decrease the health risk for consumers

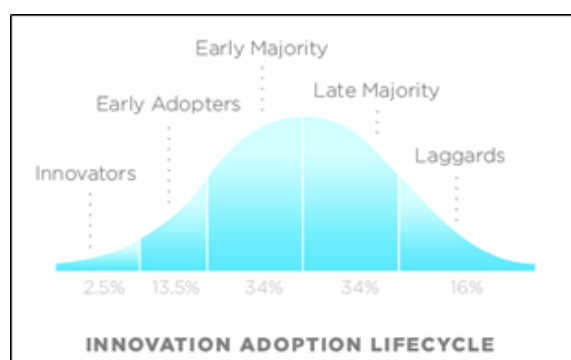


Figure 1: Diffusion of innovation

Rogers' diffusion of innovation (DOI) theory is widely used as a theoretical framework in various studies on scaling up of innovations. Based on the time taken to adopt a new technology in innovation life cycle, the population is categorised as innovators, early adopters, early majority, late majority and laggards. The distribution of the group is represented using a bell curve as shown in figure 1. While this framework helps in understanding the diffusion process in a demography, it doesn't directly help in capturing the factors influencing the behaviour like social constructs, institutional regimes, and characteristics of key stakeholders. A pilot survey conducted in Odisha to characterise the adoption of sustainable farming practices based on

Roger's DOI theory, was neither farmer friendly nor helped in capturing the interactions between technology and farmers.

An alternative framework was designed to characterise the interaction between technology, intervention and farmers' behaviour as shown in figure 2. The questionnaire was designed based on this conceptual framework and various socio-economic and agro-ecological factors studied in the literature. A set of 40-60 farmers was interviewed using the questionnaire in each of the 11 states to understand the experience of farmers adopting sustainable farming practices and identify the challenges in scaling of these sustainable agriculture. The questionnaire was improvised to suit the local context in each state without modifying the overall structure. An abstract from the findings of each of the state is presented in the following session.

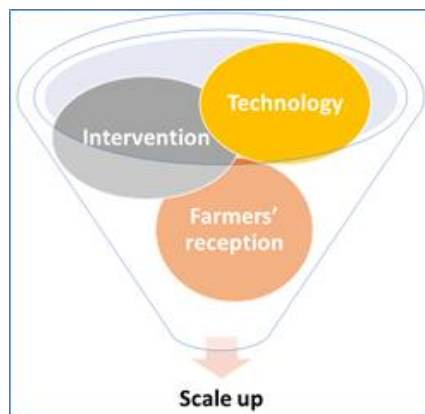


Figure 2: Conception framework

Challenges in scaling up of sustainable farming practices in Odisha

Siva Muthuprakash K M and Shanshank Deora, VikasAnvesh Foundation

Average crop yields in Odisha is significantly lower than that of the national average in almost all the principal crops. While average fertilizer consumption in India doubled over the last two decades, it has not changed significantly in Odisha. Unsurprisingly, the state is home for a large number of farmers who are by default organic farmers (who have neither used synthetic fertilizers nor pesticides ever). With the increasing awareness towards consumption of organic food, farm produce from these farmers are potentially a premium produce. But, most of these farmers are subsistence farmers with least or no link with market neither for inputs nor for selling their farm produce. There have been initiatives to enhance the productivity of these farmers through sustainable farming practices like system of root intensification, organic farming, kitchen garden, etc. In order to understand the experience of farmers in adopting these sustainable farming practices, a survey of about 80 farmers with about 40 personal interviews and 7 focused group discussions (FGDs) is conducted in two districts (Kandhamal and Koraput). About 70% of the respondents are small and marginal farmers who also migrate to work as labors to other states during non-cropping season to meet their growing household expenditure. While 70% of them are aware of line transplanting methods, less than 40% were aware of organic practices like jivamrut, handikat. Conservation of soil health and increasing the crop yield are found to be the top motivating factors to adopt transplantation and organic farming practices. Though the reach of organic farming practices is limited to less than 50%, adoption rate is found to be more than 80% among the farmers who have received training. Lack of knowledge, access to organic inputs, fragmented land and lack of irrigation are the major challenges reported by farmers in adopting organic farming practices. Net income of most of the farmers has increased due to significant increase in their yield and reduction in cost of cultivation. A stark difference in the yield, farm income and farming practices is observable between the village Gachergan and Sodakia located within the same block (Tumdibandh) hardly couple of kilometers apart. Although both the villages are inhabited by similar community, farmers from Gachergan are well-versed with various organic farming practices and marketing of their farm produce as well. Interviews and focused group discussions highlighted that the knowledge on farming techniques to be a critical factor that limits their development. The high adoption rate shows a huge potential for both improving the livelihood of the farmers as well as decreasing the yield gap in Odisha compared to other states.

Challenges in scaling up of organic farming in Punjab

Siva Muthuprakash K M and Vaishnavi Pawar, VikasAnvesh Foundation

Punjab is considered as a heartland of green revolution in India. The yield and production of foodgrains has grown multiple folds from 2081 Kg/Ha and 10.2 Million tons to 4709Kg/Ha and 31.7 Million tons in last four decades. Similarly, fertilizer and pesticide consumption has also increased tremendously during the same period which has also caused several undesirable impacts on human health and the environment. There has been increasing awareness towards exploitation of ground water and the need for consumption of healthy and organic food. However, number of farmers moving toward organic farming has been negligible. A survey of 56 farmers was conducted across six districts (Faridkot, Moga, Bathinda, Barnala, Sangrur & Patiala) in Punjab to understand the barriers for conventional farmers to shift toward organic farming. About 70% of the respondents were medium and large scale farmers and about 65% of them were above 40 years of age. While 98% of them were aware of organic farming practices, 65% of them were practicing them in a small parcel of their land. Human health was found to be the major motivation (72%) to adopt organic farming followed by soil health (19%). While, composting and green manuring are the two widely adopted organic practices, jivamrut and dhasparani had a significant drop out. High labour requirement (85%), Marketing challenges (76%) and Low yield (72%) were the top challenges reported by the farmers in organic farming. In spite of decreased cost of cultivation, increased number of crops cultivated and availability of premium price, net income of most of the organic farmers are reported to be low due lack of sufficient marketing support and reach. Three fourth of organic farmers have adopted organic farming in less than half of their landholding due to these challenges, and feels the market outreach with premium price to be the bottleneck in scaling up of organic farming.

Challenges in adopting organic farming practices in Himachal Pradesh

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Sustainable agriculture in Himachal Pradesh has been growing in an organized manner for over the last decade and a half. As of 2018 the state has 175,000 hectares under third party and Participatory Guarantee System (PGS), also as of 2018-2019 the state government has launched the Zero Budget Farming Mission (also called HP SPNF - Himachal Pradesh Subhash Palekar Natural Farming Mission). Under this mission 50000 farmers are being trained in techniques in sustainable agriculture with the goal to have Himachal Pradesh turn into a completely Natural Farming state by 2022. Sustainable farming practices are being done without the use of agri-chemicals in a few pockets but large number of farmers familiar with it as a tradition. In this study, challenges and interventions for scaling up Sustainable farming practices data was collected for about 64 farmers across 3 districts - Mandi, Kinnaur, Kangra and Shimla. 95% of the farmers surveyed were small or marginal farmers and 20% women farmers were surveyed. 63% of the farmers surveyed had completed Primary or Higher education. 83% of the farmers had cattle as livestock on the farmsteads and 30% of the survey had agriculture as their primary source of income, with the remaining having at least one member of the household in a job (in government or private sector) or working as wage labour. The survey also indicated that 77% of farmers have knowhow on sustainable agricultural techniques and are practicing it. There is also great motivation for the farmers to convert with over 90% of those surveyed indicating the Soil Health and conserving Agroecology as the primary motivator to continue with Sustainable Agriculture. The main challenge facing the farmers are the non-remunerative returns from Agriculture and thus the issue of market access. Additionally, 44% of the farmers feel that the labour requirement increases as they switch to sustainable agricultural practices with over 76% also experiencing an increase in drudgery. This goes to show that there is a need for suitable tooling especially considering sustainable agricultural needs. Interestingly 60% farmers have reported weed management as a challenge since conventional weedicides are not recommended for Sustainable agricultural techniques. In terms of practices 73% farmers have reported the satisfactory use of inoculants such as Jivamrit and Panchgavya and 68% have reported intercropping as a means of co-production. Participation of Women in various agricultural activities is in proportion to men, however they share a greater portion of labour in weeding processes. However, market access is almost always handled by male members. The study indicates a clear trend towards sustainable agriculture however the primary challenge remains on how the farmers can suitably access the markets in future.

Challenges in scaling up of sustainable agriculture in Assam

Martin Rabha, Diya Foundation, Kamrup Rural, Assam

The study on sustainable agriculture was carried out in Assam state under Kamrup rural district with the aim to find out agricultural practices, issues and challenges, participation of various stakeholders and service availability towards sustainable farming. The study was carried out through personal interactions and focused group discussions with the small and marginal farmers who have just 2 to 3 acres of cultivable land. Among the various crops grown Paddy is the primary crop during kharif season and it is one time cultivation for rest of the year and it mostly for self consumption whereas seasonal vegetables were also produce for sale (about 80 %). The agricultural intervention is done majorly through rainfed and there are very little presence of irrigation facility. Farmers mainly irrigate their vegetable crops during rabi season using small electric pump sets (0.5 hp) from open source such as well, tube well and pond. People mostly irrigate during paddy seed nursery sowing period through hard manual labor. At least 60 percent of the farmers surveyed are practicing organic cultivation since 4 to 5 years and they mostly apply cow-dung, vermicompost and compost made out of homestead waste in the household. They also practice organic pesticide such as Jivaamrut, Vermi-Wash etc to protect their crop from pest attack. As described by most of the farmers cost of cultivation has also marginally increased so as well the production and labor, quite many of them expressed it is a labor intense activity. Participation of women in agriculture is seen equal to men in most of the operations except in Pesticide control and fertilizer application where men take the lead.

The process of organic certification is very complex as expressed by majority of farmers and at least 40 percent of the farmer's reveals that they are not at all aware. The CSO engaged with the farmers for the promotion of sustainable agriculture are also not been able to facilitate in achieving the same due to complex process in the government department neither there are any initiatives taken for the department side. The CSO actively promotes formation and development of community institutions such as SHG, FPO at village level. The farmers were also trained and given exposure programs in various capacities in order to promote organic cultivation.

Challenges in scaling up of sustainable agriculture in Mulshi Taluka of Pune District

Vaishnavi Pawar and Siva Muthuprakash K M, Vikasanvesh Foundation

Pune district is a large industrial as well as a commercial agricultural centre. Fast urbanisation and industrialisation are bringing much agriculture land under non-agricultural purposes. The demand for organic agricultural produce and dairy produce is increasing in urban areas. The study was undertaken to understand the challenges conventional farmers face while converting to sustainable agriculture and then scaling it up. For the study, 39 farmers from Mulshi block of Pune district were interviewed. More than half of the farmers (58%) interviewed used organic techniques for production of produce for self-consumption only. Majority of the farmers (87%) were small and marginal farmers, while 66% have completed their education till high school. Because of industrialisation in the area, 34% of the sample practised agriculture as a secondary occupation. Producer and consumer health (79%) and soil health (38%) were the top motivational factors for farmers to adopt organic agriculture. Experiences of the farmers are that while the cost of cultivation has decreased, drudgery has increased marginally. Yield has decreased, but income has increased marginally due to better price realisation. The number of crops cultivated, saleable produces, and crop duration has increased marginally after switching to sustainable agriculture. The top challenges faced by conventional farmers while converting to sustainable agriculture are low yield (55%), price realisation (54%), access to organic inputs (45%) and irrigation constraints (40%). Lack of knowledge and institutional gaps were not significant barriers in adaptation of organic farming practices as farmers received regular training from private as well as public agencies. While price realization (63%), marketing (45%) and low yield (63%) were the significant challenges for the farmers whose primary source of income is from farming; access to organic inputs (65%), low yield (42%) and weed management (42%) were the main challenges for the farmers who had their primary source of income outside the farming activity. Though the farmers could sell directly to the consumers avoiding middle-men, they are able to do such direct marketing only to a small proportion of their produce. The agencies who work with farmers in Mulshi district have attempted to provide stable marketing channels to the farmers for fruits and vegetables. However, the efforts were not successful because of the irregular demand as well as supply. The agency has been actively helping the farmer to apply for organic certification. However, despite the efforts, marketing of organic produce has not seen good results nor does it fetch the expected price.

Challenges in scaling up of sustainable farming practices in coastal Gujarat

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Gujarat has the longest coastline (1,663 km) among the Indian states. Saurashtra region in Gujarat has a coastline of 1134 Km and has a total geographic area of 60.95 lakh hectares. The climate is dry sub-humid with deficient average rainfall ranging from 400mm-750 mm annually. It is estimated that 7 lakh ha of coastal land in Saurashtra is in the process of losing its fertility due to the salinity problem. The average organic carbon content in the soil is 0.35, and the average water holding capacity is reduced to 35%. Unrestrained chemical consumption is increasing market dependency of vulnerable populations on private players widening the existing economic gap. Several civil society organizations and Government agencies are working towards the need of the hour. Several programs have been initiated for providing economic and knowledge support to farmers for promoting sustainable agricultural practices (SAP). A survey of 84 farmers was conducted in coastal Gujarat region of Talaja, Bhavnagar District and Rajula, Amreli District to understand the behaviour and factors that incentivize people to adopt sustainable agricultural practices. Around 49% of the respondents were small and marginal farmers while remaining 51% were medium-scale farmers. Age-wise, 50% of farmers were above 40 years and 50% below. Animal husbandry (54%) and private job (24%) were found to be significant as secondary occupation after agriculture. Cotton, Groundnut, Onion and Wheat are major crops cultivated in this region, with 95% land being fully irrigated in Kharif, while 52% land being fully irrigated and 43% partially irrigated in Rabi season. Out of the practices promoted, 100% of farmers are using bio pesticides, 93% have adopted composting, and 90% have adopted cattle urine/Decoctions, and 89% are using insect traps. Major issues perceived by the farmers that motivated them to use sustainable agriculture practices are effects on human health (86%), followed by soil health (79%) and conservation of agro ecology (75%). There has been a marginal decrease in the cost of cultivation, but the yield and price realization have remained majorly unaffected. Major challenges faced are marketing challenges (86%), price realization (83%), and weed management (79%). Women labourers includes household women are majorly involved in weeding, harvesting and post-harvesting activities. Weeding, harvesting, and post-harvesting are the major activities that involve drudgery. Major support provided by programs undertaken by civil society organizations is access to government subsidies, input support followed by community institution building and knowledge sharing, and innovation process. It has been observed that adoption of SAP's has gained momentum in last 3-4 years pertaining to efforts of government and Non-Government Organisations functioning in the area. The way forward is to focus on marketing and value chain Management of the produce for income enhancement and improvement in quality of life indicators.

Challenges in scaling up of sustainable farming practices in Jharkhand

Siva Muthuprakash K M and Vaishnavi Pawar, Vikasanvesh Foundation

Jharkhand aspires to be the organic hub of the country and intends to promote thousands of organic clusters across all its districts especially in horticulture crops. Various secondary data shows that the fertilizer inputs and cost of cultivation in the state are among the lowest in the country. However, the manure input per hectare is also among the lowest in the country. In order to understand the experience of farmers in adopting these sustainable farming practices, a survey of 46 farmers through personal interviews is conducted in two districts (Saraikela Kharsawan and East Singhbhum). Over 90% of the respondents are small and marginal farmers and about 50% work as labors locally or migrating to other states. The motivation to adopt organic practices is quite low with just 46% and 30% of farmers citing human health concerns and soil health as their motivating factors. Both the reach of organic farming practices as well as its adoption is found to be limited in the study areas with about 40% of farmers being aware of organic practices like jivamrut and handikat, and only 20% of the farmers were practicing these organic practices. Lack of knowledge, access to organic inputs, difficulty in livestock maintenance and lack of irrigation are the major challenges reported by 87%, 67%, 52% and 52% of farmers respectively. Though about 50% of the farmers have reported a marginal drop in their yield, net income of most of the farmers has remained unchanged as 85% of famers had decreased cost of cultivation and about 50% reported to get premium price for their produce. Labor requirement and drudgery in adopting organic practices were largely reported to remain same as that of the conventional farming practices. In stark contrast to many other states, the adoption rate of organic practices like jivamrit and handikat has remained very low due to lack of training and access to organic inputs. Farmers cite lack of manpower for open grazing as a constraint in maintaining more livestock. Promotion of organic farmer producer company by the local non-profit is gradually pulling the attention of these farmers towards organic farming. However, capacity building remains to be the bottle-neck that limits the productivity and adoption of organic farming practices.

Challenges faced in scaling up of organic farming in Nagapattinam district, Tamil Nadu

Subhshini Sridhar, Sirkazhi Organic Farmers Association, Sirkazhi, Tamil Nadu

SOFA (Sirkazhi Organic Farmers Association) is a Farmer Federation having 350 members including women working on promotion of organic farming in Nagapattinam District. CIKS (Centre for Indian Knowledge Systems) has been providing technical support since 2006. Marketing has been done through Valanadu Sustainable Agriculture Producer Company Limited operating with 2650 shareholders in Nagapattinam district. Currently, a total of 140 acres (60 farmers) are under certified organic, 420 acres (590 farmers) under NPM (non-pesticides management) spread over 5 blocks in Nagapattinam district. A study has been conducted to understand the challenges faced in scaling up of organic farming in Sirkazhi taluk during July – Sept 2019. This region is situated in the Cauvery delta with extensive irrigation canals. A total of 60 respondents (30 organic farmers and 30 conventional farmers) were selected from 2 blocks viz. Sirkazhi and Kollidam blocks in Sirkazhi taluk, and interviewed using questionnaire and focused group discussions. While 40% of the respondents are small and marginal farmers, remaining 60% are medium and large farmers. About 75% of the farmers considered the human health and soil health as the major motivation to adopt organic farming practices, followed by conservation of natural resources and agro-ecology (30%). Major challenges reported in scaling up of organic farming are drudgery in input preparation (98%), weed management (85%), low yield (70%), and price realization (62%). Availability of labour for agriculture and increasing in labour wages (Rs.550 to Rs.600/day for men labour) are also perceived to be constraints for adopting organic practices. Out of the farmers practicing organic farming, about 80% reported a decrease in cost of cultivation and about 50% reported a reduction in their yield compared to conventional practices. However, only 25% reported a decrease in net income. As far as women involvement, key role is found in organic input production, seed sowing and weeding operation, which are considered to involve highest drudgery (73%). To conclude, a majority of farmers expressed high price realization as key factor in scaling up of organic farming in Sirkazhi taluk, Nagapattinam district.

Experience from ZBNF farmers in Andhra Pradesh

Rajesh Serupally, Freelance Researcher and Journalist, Hyderabad

The state of Andhra Pradesh is the richest agrarian state in southern peninsular, with two major rivers and its tributaries. The land between these two rivers have made the soil fertile and agriculture heaven which was taken advantage during the green revolution. With a spike in the harvest, farmers have increased the use of fertilizers and pesticides with a hope of good fortunes. However, this has often led to soil degradation and increased the risk faced by farmers. In order to overcome this crisis, Andhra Pradesh Government has crafted ZBNF farming practice immediately after state bifurcation in 2014 October and RYSS being its implementing agency (NGO). To understand the implementation of ZBNF, we have conducted structured and non-structured interviews with a sample size of 59 farmers from four districts of Andhra Pradesh. The small and marginal farmers composed 58% and medium farmers are 42%. A large percentage of farmers do farming on leased land who also have their small landholdings. Almost all the farmer respondent have exposure to ZBNF and over 80% has attended the Training, demonstration and been on exposure visit. Human health and soil health concerns, conservation of agro-ecology were the top motivation factor (50%) for the farmers to adopt ZBNF. A small portion of farmers (25-30%) reported self-reliance, reduction of risk and premium prices to be the motivating factor. Women labour play huge role in ZBNF as their contribution to sowing and weeding are the major areas of drudgery. Adoption of organic farming practices like jivamrut and insect traps are as high as 95% and adoption of dasparani is just about 40%. Over 80% of the farmers reported a decrease in the cost of cultivation and increase in net income. About 50% of the farmers reported increase in yield and number of crops cultivated after adopting ZBNF. Marketing and price realization are found to be the major challenges reported by over 80% of the farmers, followed by low yield, weed management, drudgery and lack of institutional support reported by over 60% of the farmers. The field observations and discussions indicated that state-run program has not yet seen its potential as it faces many hurdles such as marketing, livestock, and tenancy issues.

Identifying challenges and potential interventions for scaling up of sustainable farming practices in Bihar

Mihir Sahana, Mahua Ghosh Sengupta, Amit Gaurav, Kumar Gaurav, Sarve Seva Samity
Santha, Kolkata

Excessive use of chemicals in agriculture has proven adverse effects on the environment and ecosystem also. Because of growing awareness about the ill-effects of chemical use in agriculture, interest in alternate methods to reduce chemical use in farming has been increasing in India and around the world. Many civil society organisations as well as state have been promoting sustainable agriculture in form of Organic Farming through different schemes and programmes. This study focuses on identifying various challenges faced by farmers in adopting or continuing organic farming. The population under study comprises of farmers at different points in the continuum from conventional chemical-intensive agriculture to only natural input based organic agriculture. Both government and non-governmental organisations facilitating different sustainable farming practices has been a part of the sample population. About 50 farmers from three different locations of Bihar was covered in the study. Apart from this, the promoting agencies, like PRAN & AKRSP locations were interviewed to understand and characterize more interventions across the country. The top three motivation factor to adopt organic farming were deteriorating soil health (92% of respondent), hazards to producer & consumer health (70%) and increasing cost of cultivation (28%) due to excessive use of chemicals. Based on the experience of farmers in doing organic farming, the study found that cost of cultivation has significantly decreased. At the same time more than 60% respondents felt that labour requirement and crop duration has increased. The major challenges faced by farmers in adopting or/and continuing organic farming are low yield and lack of premium prices. More than 60% farmers have reported that practicing organic farming has resulted in reduction of yield by 15-20%. Most of the farmers have adopted organic farming with a desire to get better price realization, which is not happening in real scenario. More than 50% of the respondents have experienced no change in price realization of their organic produces. Other challenges faced by farmers are increase in labour requirement, pest & disease attacks, lack of institutional support, lack of knowhow, drudgery and marketing challenges. Interviews with promoting institutions indicates that promotion of packed organic inputs by establishing dealer-distributor network and gradual shift from conventional to non-pesticide management (NPM) followed by replacement of chemical fertilizers with organic fertilizers, hold the key for scaling up of sustainable farming practices.

Challenges in scaling up of organic farming in Sikkim

Vaishnavi Pawar and Siva Muthuprakash K M, Vikasanvesh Foundation

In 2016, Sikkim was formally declared a '100 percent organic' state - the first in India. From 2003, the state began reducing the subsidy on chemical pesticides and fertilizers by 10 percent every year and banned them entirely in 2014. Their sale and use were made punishable by law with imprisonment of up to three months or a fine of up to Rs 1 lakh or both. To give a further push to its organic-farming experiment, the state government banned the sale of selected non-organic vegetables and fruits into the state from April 2018. However, the ban was revoked later. A survey of 64 farmers was conducted across two districts- West Sikkim and South Sikkim to understand the barriers for farmers to shift toward organic farming. The major crops cultivated are ginger, cardamom, paddy, buckwheat, *Amriso* (Broom plant) and fruits like oranges and guava. Some of the farmers interviewed practiced conventional agriculture using chemical fertilizers before the ban. The state government distributed chemical fertilizers and pesticides. There is shared consensus that the chemical fertilizers gave a better yield and after switching to organic agriculture, the yield had reduced significantly. According to the study, it takes almost 4-6 years for the land to regain its productivity to the same level it had before they used chemical fertilizers or pesticides. Because of lack of knowledge as well as lack of organic agricultural inputs in the local markets, composting is widely adopted practice. Significant challenges faced by the farmers are rampant losses because of pests and diseases and wild animals, low price realization and lack of institutional support. Diseases and pests have also led to a reduced cultivation of Ginger by the farmers who were interviewed. Cardamom and fruit plantations also face severe attacks by pests and diseases. Due to chemical produce widely sold in the market, organic vegetables do not get the desired higher price. The prices for cardamom and ginger – two of the major cash crops – also keep fluctuating. There is a lack of trainings and workshops for the farmers by the state government, which leaves the farmers uncertain about the organic farming methods.

Zero Budget Natural Farming: Field insights from Anantapuramu

Harikrishnan Santhosh, Kuhelika Ghosh, IWMI-Tata Water Policy Program

Although agroecological farming has been touted as a sustainable way to ensure climate resilient production, it has made slow progress as a social movement in India. The multitude of India's small and marginal farmers have refused to join the bandwagon which has been largely driven by prosperous large and medium organic farmers. Zero Budget Natural Farming (ZBNF), which first started as an agroecological social movement in Maharashtra and Karnataka, has evolved to an institutionalized state-wide program in Andhra Pradesh. Since 2015, Andhra Pradesh government has been implementing the Climate Resilient Zero Budget Natural Farming (CRZBNF) program in all districts and aims to make Andhra Pradesh 100 per cent ZBNF by 2024 covering 6 million farm families. This becomes a particularly daunting challenge for a state which is one of the largest consumers of pesticides and fertilizers in the country and has an overwhelming majority of small and marginal farmers. Anantapur District in AP lies in one of the driest areas of the country (Rayalseema region) with low and uncertain rainfall, and high soil degradation. The study focuses on field insights gained from visits to ZBNF villages in Anantapur where the roles played by various stakeholders including SHGs, FPOs, NGOs and ZBNF Community Resource Persons (CRPs) underscore the importance of integrating existing farmers' institutions with the program. Several localized solutions to issues concerning the program have been developed by local people and institutions along with the integration of ZBNF with farming techniques such as SRI and Dry Sowing which are suitable for the area. Some of the early findings show that farmers report an increase in net income from savings in input cost and improvement in soil health but also raise concerns regarding sourcing of ZBNF inputs.

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MIGRATION, RISKS & GOVERNANCE -STUDIES OF URBAN EXCLUSION AND OCCUPATIONAL HAZARDS



Migration, Risk & Governance: Studies on Urban Exclusion and Occupational Hazards

Centre for Migration and Labour Solutions, Aajeevika Bureau

Panel Abstract

Governance in India is still to wake up to the growing reality of labour migration and the blurring boundaries between the rural and the urban as sites of extraction. The life of an average migrant worker today, transacted across the rural and the urban, more often in high invisibility, defies public policy designs, challenging its limits and imagination. For all the centrality of labour migration in creation of Indian cities, do migrant workers feature in urban planning and governance? Or, do they slip through the cracks of urban governance and the regulatory functions of labour governance? Who bears the risks of a precarious life, ridden with poor working and living conditions, characterised by serious occupational hazards at workplace and absence of basic public services? Further, with the growing preponderance of small towns, *kasbas* and Panchayats as sites of extraction, how does rural governance learn to deal with questions of labour exploitation and abuse in factories? Who is responsible and do they have the requisite imagination to address the varied challenges that migration and growing informality produces? This panel brings together three studies done by Centre for Migration and Labour Solutions at Aajeevika Bureau, flagging some questions on migration, informality and risk and the ways in which our existing governance mechanisms are engaging with it.

The first study carried out in Ahmedabad looks at the interface between labour migration and the city governance – Ahmedabad Municipal Corporation (AMC), assessing the access to basic services among migrants and the nature of risks endured in its absence. Armed with the central question of whether migration features in the policy imagination of the AMC, the study also tries to make sense of the gargantuan maze that city governance is, and how does it engage with migrants in its day today functioning.

The second study focuses on a rural, industrial location of Beawar in Ajmer looking into the work and life of stone crushing workers, ridden with serious occupational hazards in the form of frequent accidents, injuries and deaths. The study seeks to understand the prevalence, causes and consequences of these workplace hazards and also ask questions on the policy vacuum and incapacity that ails these industries. Building on the unique workers profile of the industry, dominated by women and adolescent girls, the study also seeks to explore the gendered aspects of workplace risks and hazards in informal industries and its implications on a woman's life.

The third and the final study focuses on a rural block of Pindwara in Sirohi, which is a hub of stone carving workers, supplying ornate stones to temples across India and globally. Facing a high incidence of Silicosis related deaths, due to poor protective mechanisms and absent regulation, Pindwara has become a site of serious intervention for Aajeevika, Kotda Adivasi Sansthan and the workers Union, Pathhar Gadhai Mazdoor Sangh, who are collectively seeking solutions to improve worksite safety, conducting time and motion studies and innovating on the tools used, in partnership with occupational health experts. We present the findings from this action-research initiative which also underlines the risks and toxicities passes onto the worker's bodies, in absence of adequate policy response.

Informal, Inadequate, Inconsistent

Studying Circular Migrant Workers' Access to Public Provisioning in Ahmedabad

Raghav Mehrotra, Nivedita Jayaram, Divya Varma and Sangeeth Sugathan

How do circular migrant workers, employed in the informal sector in Ahmedabad, access public provisioning—housing, food, water, sanitation, and healthcare—in the city? Do they feature in the imagination of the Ahmedabad Municipal Corporation (AMC) during policy and project design and implementation? With these questions as starting points, this study highlights how migrant workers, despite subsidising the city's growth, fall between the cracks of employer liability and state subsidy. A socially grounded methodology reveals the disparate and dynamic informal networks and markets that workers are compelled to rely on, which mediate their access to basic provisioning. These networks of simultaneous patronage and extraction—with landlords, labour contractors, shopkeepers, and neighbourhood power groups—vary by workers' caste, occupation, source state, housing typology. Broadly, exclusion from formal urban governance places the migrant family at the center of daily tradeoffs between adequacy, cost and reliability of access to basic facilities. This raises questions of sedentary bias in urban policymaking and points to the nativism and ethnic citizenship governing access to the state. It implicates urban local bodies in the political, economic and social precarity facing migrant workers, and questions a system that legitimises an intergenerational transfer of poverty among already marginalised groups.

Occupational Safety in Beawar's Stone Crusher Industry

Focusing on the Experiences of Women Workers

Nivedita Jayaram, Priyanka Jain with Sumant Baptist

Single women and adolescent girls form the largest, and most preferred workforce in the rural, non-agricultural workforce. Paid well below minimum wage, and pushed into hazardous forms of work for their livelihoods, they face grave consequences due to poor occupational health and safety standards at their worksites. This study, conducted in the stone crusher industry in Beawar (Ajmer dist.) Rajasthan, brings forth the gender-based experiences of women and adolescent girls who make up the majority workforce in this industry. It examines the value chain, work relationships, machine features and factory floor organisation within this industry, which provides stone powder that is used to make ceramics and glass products which is sold across domestic and international markets. Through quantitative surveys, factory mappings, interviews with stakeholders and FGDs with women workers, it reveals how the worksites and its dynamics are designed for cost-cutting, and the manner in which these costs are directly absorbed by the most marginalised workforce.

A worker driven approach to occupational health and safety

Experiments from stone carving worker's Union to prevent Silicosis deaths

Jibitesh Sahoo for Pathar Gadhai Mazdoor Suraksha Sangh

Pathar Gadhai Mazdoor Suraksha Sangh has been leading an innovative attempt to formulate strategies for prevention of Silicosis among stone-carving, temple marking workers. Based in Sirohi district of Rajasthan, the biggest hub of temple construction in the country, the presentation discusses how the Union used the tool of Time & Motion study and spatial mapping of factory floors to conceptualise how safety could be achieved in an industry that is severely unregulated and casualised. The attempts being made in Pindwara, spanning the domains of technical solutions, policy changes and creating accountability on the industry and state is underpinned by a current of workers collectivisation, carrying these various threads of work forward, which are acting as complementary forces pushing the safety agenda on the factory floor.

Dimensions of Migration and livelihood activities to cope with disasters in the Indian Sundarban islands

Mohan Kumar Bera, BITS-Pilani Goa Campus

The impact of frequent saline water floods and river encroachment forces settlers of river side villages of the Indian Sundarban islands to leave their villages. The financially stable households have found alternative safe place by paying individual savings. They migrate temporarily for growing crops and come back in the island and some of them settled permanently at new place. There are people who are unable to leave the village and move as per the movement of embankments. However, the government had rehabilitated many affected people during 1970s and 80s, increasing number of affected people do not get adequate government supports. It was expected that people settled in rehabilitation areas or individually purchased land could enhance their resilience, because they do not experience floods and river encroachment. However, the settlers living in affected villages or rehabilitated villages or individually purchased land, migrate in search of job. They engage in similar types of livelihood activities and the destination for migration is also same. Villagers shifted at resettlement areas, are unable to reduce the vulnerability. However, villagers living at flood prone areas have been waiting to shift at resettlement areas supported by the government. The research investigates how migration contributes as an alternative measure to supports settlers affected by river erosion and frequent floods.

The research has been conducted in three villages (i.e., one resettlement village, one affected village- having long experience of disasters; and one village -having recent experience of disasters) in Sundarban islands to see the changing pattern of migration in search of job. It is found that, migration from affected villages to non-affected villages depends on livelihood strategies among the villagers. There are different levels of coping mechanisms with different vulnerabilities among people living at three different villages. Those who have purchased land at safe place i.e., main land, they are able to buy small plot to build a house, but not for agricultural activities. Therefore, crisis of resource remains. On the other hand, rehabilitated lands are unproductive that do not provide adequate livelihood supports. Therefore, spatial shifting does not reduce the socio-economic vulnerability and migration remains as an important livelihood strategy for coping with disasters.

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UNDER-REPRESENTATION OF MUSLIMS IN HIGHER EDUCATION



Exploring causes for under-representation of Muslims in Higher education

SJ Phansalkar, VikasAnvesh Foundation

Concept note

As per the Report of the All India Survey of Higher Education, only about 5% of the students enrolled in Colleges and Universities are Muslims. This proportion is much below 15%; which is the share of Muslims in total population of the country. Even granting that the Muslim communities are relatively poor and socially isolated, this gap is much larger than the similar gap for Scheduled Castes or OBC categories. It may be noted that under-representation could at times be caused by remote location of habitat and large distance and poor connectivity to centres of learning. However, considering that over two-third Muslims in India are urban, unlike people from Scheduled Tribes who live in remote, hilly and forested areas; this under-representation is remarkable. It may be noted that neither is such under-representation unique to India nor is it a recent phenomenon. In 1990, only 2.5% persons in the University Graduates category were Muslims, and this number has increased to about 4% in 2010. Thus, there has been a secular trend of a high degree of under-representation of Muslims in higher education.

Strong, if anecdotal, evidence points to possibly much larger under-representation of Muslims in professional courses that are gateways to high paying, white-collar professions the personnel from which provide social and intellectual leadership to the society. A quick survey will reveal how few chartered accountants or Architects or medical professionals practicing in any city come from Muslim communities. Muslims seem to be reasonably well represented in the field of Arts, including films and in sports; but in most other elite professions they seem to be lagging way below their share in the population.

It is surprising that this degree of under-representation has not attracted significant research or policy attention. Focus of Educationists concerned with Muslim communities seem to work much more on elementary education, improvement of Madarsas and improving the education level of the female Muslim population.

The research in this theme was fired by curiosity about what holds back Muslims from higher education despite their favourable urban locations. The underlying presumption in the theme is that as the world moves forward, technology and knowledge will dominate all walks of life and higher education being a gateway to both; communities lagging behind in higher education are likely to be left behind others over time. It serves non-one's purpose to let a sixth of the population of the country lag behind possibly for causes which are controllable and avoidable.

Eight papers have been prepared in this theme. One of them is based on secondary data alone and explores the supply side asking are there enough educational facilities in districts which have a higher concentration of Muslims? The rest are based on fieldwork which involved interaction with adolescent Muslim students aspiring for higher education as well as young men and women who recently completed higher education. These field surveys were done in order to understand from these students and alumni about the challenges which they faced and how they overcame them. Data and views were also obtained from Educationists, society leaders and knowledgeable people.

Abstracts

Behind Under-representation of Muslims in higher education: A case study of West Bengal

Partha Sarathi Banerjee, The Researcher

The Muslims in West Bengal, like most other states in India, are under-represented in higher education compared to their proportion in the population. The present study, undertaken through a review of literature including previous studies combined with information collected through interviews of Muslim students, alumni and intellectuals, is intended to examine the reasons behind this prevailing imbalance in a state known for its pursuance of secular culture and politics.

Among the distinctive features of West Bengal Muslims, the principal is that they live mostly in backward rural areas that are marked by under-development in almost all aspects, including the glaring deficit of educational infrastructure. Economically, Muslims in West Bengal are among the most backwards in the state, belonging to the lowest strata of land ownership with nominal access to white-collar jobs.

Politically, they never have proper representation in the corridors of power, and hence lack necessary voice to raise issues related to the lack of basic amenities that are denied to the community since partition that ensued largescale migration of middle-class Muslims to the other side of the fence.

The ruling elite of the state, irrespective of political colours, is dominated by the upper caste *bhadraloks* who have inherent anti-Muslim bias, which is reflected not only in their indifference to improving upon the basic educational infrastructure in the Muslim-majority blocks, but more so by their adverse attitude towards independent endeavours to improve educational facilities coming from among the community. All these not only severely restrict access to higher education of the Muslims in the state, but also undermine their motivation and initiatives to alter the imbalance.

Under-representation of Muslims in Higher Education: Current situation and indicative reasons

Md. Amjad Khan, The Braintrust Consulting

There is a historical trend of lack of participation of Muslim youths in higher education due to multiple factors. *The vicious cycle* of poverty and lack of education, particularly higher education is often repeated. It is important to understand the barriers to education, notably higher education from the perspective of Muslim youths. This research engages with 39 Muslim youths from different socio-economic backgrounds from North and North-eastern states of India further explore the causes of low enrolment and identify interventions to enhance the participation of Muslim youth in higher education.

Assumptions of the study are poverty among Muslims is resulting in a low enrolment rate of Muslims in higher education, religion is not encouraging modern education; thus, large population of the minority is focusing on 'literate below primary' and primary education and the role of state governments for creating a conducive environment to raise the enrolment of minorities especially Muslims.

The survey reveals that lack of timely guidance, support and networks are major barriers to pursue higher education. The students who were interviewed admitted that they inspired to get the higher education by other family members or neighbours who had already got higher education. The youths who were interviewed were mostly from Jamia Millia Islamia University, Delhi; 90% accepted that the reasonable fee structure of the institution was an important factor. Many Muslim youths prefer enrolment in institutions like Jamia and AMU compared to non-Muslim dominant institutions. This actually limits the scope of higher education for Muslim youths.

Under representation of Muslims in Higher Education: How and Why the Kerala Story is Somewhat Different?

Jose Sebastian, Institute for Enterprise Culture & Entrepreneurship Development (IECED)

The study has gone into the historical and socio-economic factors underlying the comparatively better representation of Muslims in higher education in Kerala. Historically, the Mappila Muslims of Malabar who forms 72% of Muslims in Kerala were educationally much backward than their counterparts in Travancore and Cochin. While Malabar was part of the Madras Province of British India, Travancore and Cochin were princely states.

The Mappila Muslims of Malabar always had a strained relationship with the British. This, together with conservative attitude, resulted in extreme backwardness of Muslims in modern education. After independence, Malabar became part of unified Kerala following re-organisation of states on linguistic lines. Malabar Muslims caught up very fast with other communities in the post-independence period. The major contributing factors are the Indian Union Muslim League's holding Education portfolio for quite a long time, social reform movements, Muslim Educational Society and Gulf remittances. Of the four factors, the last one, namely Gulf remittances, has been a game-changer as far as Muslim education is concerned. Kerala opened up higher education sector for private investment in 2000. Armed with disposable surpluses earned from the Gulf countries, Muslims entered the higher education sector in a big way by opening several self-financing institutions.

Though Kerala Muslims could overcome the educational backwardness to a great extent, education of young Muslims confronts new challenges. The tendency of young and educated Muslims to get swayed by extremist/fundamentalist ideas is a cause of concern. How the community negotiates with these challenges and forges ahead is crucial for the future of Muslim education in Kerala.

**Change in the Levels of Educational Backwardness of Muslim Women in India:
Evidence from NFHS-I to NFHS-IV (1992-93 to 2015-16)**

Dr. Mallika B. Mistry, Anjuman Khairul Islam's Poona College, Pune, Maharashtra

The study aims to find trends in the levels of education among Muslim women between NFHS-I and NFHS-IV, i.e. from 1992-93 to 2015-16. Further, to compare and contrast the trends among Muslim women with those among women from different religious groups. During the period from 1992-93 to 2015-16, the sharpest increase in the percentage of women who have completed high school is found amongst Buddhist women followed by Sikh, Christian, Hindu and Muslim women.

It's heartening to learn that during the period 1992-93 to 2015-16, i.e. between NFHS –I and NFHS-IV, the percentage of women who have studied above high school has significantly increased among all the communities. The sharpest increase is found amongst the women of Jain community, followed by Sikh, Christian, Buddhist, Hindu and Muslim women.

In 1992-93, both Buddhist and Muslim women were at the lowest rung of the ladder. In 2015-16, Buddhist women have gone much ahead of Muslim women. In 2015-16, the percentage of women who have studied above high school is the lowest among the Muslim women. A striking gap is observed in education level of women of all other religious groups in comparison to Muslim women.

Study examines the reasons for the educational backwardness of Muslim women and produce recommendations towards policy implications. Literacy among Muslim women becomes imperative for the making of a dynamic community which can face the challenges of a modern society. Affirmative action in education is the best way to enable them to catch up with women from the other religions in a reasonable period. This requires a clear vision, planning, hard work and missionary zeal on the part of the Muslim community and its leadership.

Under-representation of Muslims in Higher Education: Current situation and indicative reasons

Shashi Bhushan Singh, Supporting Associations for Thematic and Holistic Initiatives – Uttar Pradesh (SATHI-UP)

National Sample Survey 64th Round conducted in 2007-08 presents the information on participation in higher education in terms of social and religious groups. Result shows that the Gross Attendance Ratio (GAR) of Muslims stands at 8.7 percent as opposed to 16.8% GAR of Non-Muslims in higher education. If GAR of Muslims is compared with other social groups, it can be observed that it is higher than the GAR of Scheduled Tribes at 6.63 percent but lower than the GAR of Scheduled Castes at 10.65% and much lower than the GAR of Other Backward Classes at 13.67 percent.

The important characteristics of Muslim participation in higher education is that at higher levels of higher education, such as, at the post-graduation level, attendance of Muslims falls considerably. Besides, higher percentage of Muslims (as compared to non-Muslims, 22.4% as compared to 19.2%) ends up doing Diploma & Certificate below Graduate Level. The rotation of factor structure such as Family expectation to take up a job, Value for traditional profession in the family and Compulsion to start earning soon to support the family, has clarified the things considerably.

The top 8 States in terms of highest number of colleges in India are Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Telangana, Tamil Nadu and Madhya Pradesh. Uttar Pradesh being a highest populated state of India comes at number one with the highest student enrolment followed by Maharashtra and Tamil Nadu. Situation reflected from the different secondary data & information motivated to know more about the reason behind these. This study has been based on discussions with adolescents and young Muslim persons, with Muslim persons who have gone through the stage of education to obtain their assessment of the factors which pushed them in and pulled them away from higher education and discussions with educationists and civil society actors.

Study derives that 62% families have 6-7 members; 12% families have 8-9 members. Families' want their children to get higher education and be engaged with livelihoods opportunity as the government jobs. Single earning member runs 60% families. 16% families are run by 2 earning member, and their focuses are on getting job and enhancing livelihoods. Women representation in income generation activities is zero/0.

Representation of Muslims in Higher Education in Assam

Martin Rabha, Diya Foundation

The study of educational progress in Muslim community is carried out in three districts of Assam namely Kamrup (rural), Goalapra and Darrang. It aims to bring the ground data by involving the stakeholders through formal interactions with open and closed-ended questions with the Muslims youth who underachieved due to the constrains.

Social taboos, negligence from learned person within the community, political gimmicks, own community, absence of proper transport, teachers, infrastructures are found to be the major problems. The other important drawbacks seen are the early child marriage, especially among the girl child of rural and some areas of char. Poverty and absence of good institutions in the local or nearby area demotivates higher education aspirants.

Respondents expressed that it was also a motivation from family and friends that by going for higher studies not much development or benefit can be made as there were lot of examples in the surroundings and therefore, they are pushed or motivated to join skill-based activities, shops, vending etc.

For girls, it is assumed that when they reach class 9 or 10, the further education plans are obstructed with the views of marriage and their house chores and other non-earning activities. It is also a general perception in the community that if the girls are allowed to go for higher studies, they will get involved with boys in sexualities, and other bad habits and which will bring shame to the family, community and village at large. Therefore, they are least encouraged to pursue higher studies.

Views of those who have completed higher education are significantly different about low rate of education in Muslim community. Most of the educated people are from good economic background. They state that most of the Muslim families are poor in economy, knowledge and awareness. They think only about the daily needs and survival, so they involve in earning daily wages. Early marriage and multiple children also one of the causes of school drops out barrier of high education. Most of the poor Muslim families practice early marriage and abstain from any family planning, resulting in larger family size.

The study finds that the students have to travel to Guwahati which is about 120 – 150 kms for attaining higher education such as master degree, professional degrees etc. On the other hand, negligence from own community and lobby within close families and relatives hinder receiving scholarships, schemes etc. It also reflects that due to religion they are discriminated and harassed while obtaining Permanent Residence Certificate (PRC), an essential document for getting admission in professional courses such as masters in agriculture, medical etc.

Under-Representation of Muslims in Higher Education - A Case-Study of Telangana

Archana Londhe, Independent Researcher

“Iqra” the first word of Islamic holy book Quran, implies “read and seek knowledge”. It is unfortunate that in India, the followers of Islamic tradition, which instructs to seek knowledge from every possible source, have become topic of their under-representation in higher education. As per the latest AISHE Report: 2018-19, the percentage of Muslims enrolling for college education is measly 5.23, compared to their share in Indian population at 14.5 percent.

Evidence from NSSO data shows that although Hindu OBCs started marginally lower than the average citizen in 1999, they are almost on par with the upper castes now. However, Muslims who were on par with OBCs then have fallen way behind. They were at the average forty years ago but now are behind everyone including the STs. As per the empirical data provided by the Post-Sachar Evaluation Committee Report (2014), India Exclusion Report (2013-14), 2011 Census and latest NSSO reports Muslims are the poorest and most discriminated community of India. The low access to government jobs, land-ownership and access to bank credit make them dependent on the informal economy of unorganised sector.

However, the worrying trend is Muslims are increasingly finding it difficult to get better education than the previous generations as per the finding of World Bank-Dartmouth-MIT study. They have become the least upwardly mobile group in terms of intergenerational educational mobility among other historically disadvantaged groups like Scheduled Castes and Scheduled Tribes.

The study explores the chance of improvement, if they are living in places which are urban or in southern part of the country or in general have higher education levels. From this perspective, the case of Muslims in Telangana becomes interesting as it meets all the three criteria of upward mobility. Secondly, Muslims in Telangana have enjoyed state patronage due to Nizam’s rule, and even now they have political leadership in the state. It becomes imperative to understand the social, political and economic background of the Muslim community of Telangana before venturing into their education status.

Under-representation of Muslims in Higher Education in India –

Focus on Uttar Pradesh, Bihar, West Bengal, Assam, Maharashtra and Kerala

Sumana Acharya, VikasAnvesh Foundation

Muslims are the largest minority community in the country, constituting 13.4 per cent of the population, are seriously lagging in terms of most of the human development indicators. While the perception of deprivation is widespread among Muslims, there has been no systematic effort since independence to analyse the condition of religious minorities in the country. The literacy rate among Muslims in India lies at 68.5%, whereas the national average remains at 73%. When compared to other religions, the literacy rates remain the lowest for Muslims in India.

Education is the backbone of all national endeavours. It has the power to transform human beings into human resources. We cannot build a sustainable and prosperous nation without human resource development which mainly depends on the health and vitality of higher education. Apart from primary and secondary education, higher education is the main instrument for development and transformation. Higher education has the omnipotent role of preparing leaders for different walks of life: social, political, economic, cultural, scientific and technological. Higher education has special value in the contemporary knowledge society which contributes both directly and indirectly to the wealth of a nation

The study aims to analyse the status of literacy among the Muslims in India by states, its attainment of higher education and relevance of the factors such as distance, density, population size, urban/rural population for selected states of Uttar Pradesh, Bihar, West Bengal, Assam and Kerala.

For the analysis of secondary resources from District Census Handbook (2011) - for the district wise list of number of colleges and universities per district, separately for each state and Union Territory in India. Rashtriya Madhyamik Shiksha Abhiyaan (RMSA) – for the list of schools per district, separately for each state and Union Territory in India for 2013-14 and other such relevant national sources are tapped to address the objectives.

Under-representation of Muslims in Higher Education: A Case study of Maharashtra and Gujarat

Sumana Acharya and Palak Gosai, VikasAnvesh Foundation

A very limited number of papers and reports have been dedicated towards the educational status of Muslims in Maharashtra and Gujarat. It is essential to focus upon these two progressive western states with considerable proportions of Muslims. The purpose of the study is to understand the current status of Higher Education among Muslims in Maharashtra and Gujarat and the perspectives regarding problems and struggles faced by Muslims in attaining Higher Education.

As far the data from two national-level data sets (Census of India and AISHE) suggest, there is a great need to study these contrasting facts. Why is the community so poorly represented in education, politics, industries or service sector and what could be the major leading factors? The high drop-out rates, lack of higher education opportunities and near absence of integration of education with employment opportunities could be some of the many reasons for this low representation. Given the current political scenario, these two states with Hindu majority and history of communal riots, adds more suspicion to the prevailing situation of the largest minority community of the nation.

The literacy rates among the Muslims in Maharashtra is 83.6% which is better than the Hindus at 81.8% in the state. But when it comes to higher education, the percentages show a steep downfall at only 4.9% attending graduation and above according to the Census 2011. It is also the lowest among all the religious communities in the state.

The primary study upon the topic Under-representation of Muslims in higher Education revealed many facts that usually remain hidden to the outsiders. The states of Maharashtra and Gujarat with almost same cultural and social background also have a lot of similarities in the data collected from the students. Maharashtra with 11.54% and Gujarat with 9% Muslims out of the total state population have provided several insights regarding the education of the community in the current situation.

Further, the educational attainments of Muslims in Higher education are considerably lower than other social groups. The Census 2011 presents data that shows the Muslims represent poorly when compared to Scheduled castes and tribes in India. The major drop out of Muslims from educational institutions take place after primary level, and only about 4.9% and 2.9% from Maharashtra and Gujarat have been able to complete graduation. Urdu remains major medium of education for Muslims. While examining age-wise educational attainments, one finds that younger age-group of Muslims has made considerable progress towards higher education. However, in comparison to other socio-religious communities, the situation is still abysmal for Muslims.

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WELFARE AND HEALTHCARE OF RURAL ELDERLY



Elderly welfare and Health care

Concept Note

The population of elderly (more than 60 years) was 8.7% as per 2011 senses, and 71% of these are in rural areas. Three-fourth of Indian elderly are financially dependent on their families or others. The trend indicates that the proportion of India's elderly will increase fast. By 2050 it will be close to 19%, and it is also the year when the annual growth rate of the elderly will surpass our annual growth rate. With rapid urbanization youth is migrating to cities, and elderly remain in rural areas with lesser and lesser number of people available for care on daily basis. There are well-meaning government programs but most of them have limited reach to the beneficiaries, especially in rural areas. Even the awareness among the beneficiaries as well as other family members regarding various schemes is very low. Elderly also suffer from economic exclusion and various forms of domestic violence. At family level, there is no decision making power at the hands of elderly.

Around 65% of the elderly are suffering from some or the other chronic disease, and they have huge health care needs. For the rural elderly, there are many hurdles for access to health care. Age-Related Diseases have increasing prevalence as well as increasing proportion in hospital admissions. Understanding the major problems faced by the elderly and their challenges in availing various facilities given will help serve them better. Disability burden is also very high among elderly and more so among rural elderly. The disability rate was 51.8 per 1,000 for the elderly and 84.1 per 1,000 for 80-plus population, in 2011 which is very high compared to high-income countries. Public health system will have to orient itself in-order to tackle the burden of age-related diseases.

There is a need to conduct more studies focusing on this neglected issue of elderly welfare. It is crucial to gather evidence which can help in vulnerability reduction of elderly as well as in improvisation of existing interventions for them.

Abstracts

Problems of tribal elderly in Khasi region of Meghalaya- Basic survey findings

Abhijeet Jadhav, VikasAnvesh Foundation and Nilav J Gohain, Gramin Sahara, Assam

Introduction

Meghalaya has 4.7% population (139000) above the age of 60, and 78.8% of them live in rural areas. Out of total elderly, 8% live alone against the national average of 5%. Khasi region of Meghalaya is very difficult geography with mountain hills. This is population spars region, relatively underdeveloped and predominantly tribal. People living here, especially the elderly, have to face many geographic challenges and access to many basic necessities and health care is difficult.

Methodology

This was an exploratory cross-sectional study. The sample was selected from all the three districts of Khasi region, Viz- Ribhoi, East Khasi and West Khasi. From each district three villages were selected, making sure that they represent different geography within each district. From each village, 12 elderly were selected, making a total sample of 108. This figure covers at least 20 to 30 % of the elderly population in each village. Selection criteria were- Resident of the village, age 60 years and above, below poverty line family, and Schedule Tribal (ST) by the cast. Data was collected using a pre-tested questionnaire as well as CASP-19 validated questionnaire for quality of life of the elderly. Verbal consent was taken from the individual as well as community consent was taken from the village head.

Results

Data consisted of 35 men and 73 women. Mean age was 67.6 years, most were illiterate, and 22 could complete primary, and nine could complete secondary schooling. The average reported income of the household was 3160 per month. Out of 108 participants, 77 had agri-land with average land holding 2.58 bighas. Among the participants 93 had bank accounts, 14 had ATM cards, 23 had Aadhar card, 7 had PAN, 44 had mobile, 1 had life insurance, 68 had health insurance (govt scheme), none had PF or PPF, 29 had a pension (govt scheme). Regarding awareness of the Govt schemes for elderly, only 18 know about the special clinic for elderly in PHC/ CHC, only one knew bank-related schemes; none knew about the travel concession, insurance scheme and age assistive devices scheme.

Self-reported prevalence of Non-Communicable diseases like hypertension, diabetes, cancer, other heart problems, kidney problems were lower than national averages; however, the prevalence of eye, hearing and dental problems were quite high. Prevalence of most of the musculoskeletal problems were high. Only 18 were on regular medication, and their average monthly expenditure was 1278 INR. As private health care services are minimal, dependency on the public system is high. Average distance to nearest PHC is 3.14 KM, and it varies from 0.5 to 10 KM.

Discussion and Conclusion

Status of the tribal elderly in this region is affected by poverty, difficult terrain and harsh lifestyle. Access to welfare schemes is crucial but seem to be compromised grossly. The burden of various treatable diseases is quite high. There is a need to focus on this vulnerable section of society, and the implementation of welfare schemes needs to be improvised to a greater extent.

Problems of tribal elderly in Kamrup District of Assam- Basic survey findings

Sarat Chandra Das and Vikramaditya Das, Gramin Sahara, Assam

Introduction

Assam is one of the largest states in north-east part of India. It has beautiful but difficult terrain. Most of the villages are in or around mountainous terrains with difficult connectivity. Total population of Assam as per 2011 census is 31,205,576 of which male and female are 15,939,443 and 15,266,133 respectively. The population of Assam forms 2.58 percent of India in 2011. Of the total population of Assam state, around 85.90 percent live in the villages of rural areas. In actual numbers, males and females were 13,678,989 and 13,128,045 respectively. Total population of rural areas of Assam state was 26,807,034. The population growth rate recorded for this decade (2001-2011) was 85.90%.

It is important to look into the pattern of growth of elderly population in urban and rural areas in Assam. Diversities exist in the pattern of ageing when we consider the number of elderly population according to different place of residence, age and gender. When the elderly population is disaggregated with respect to the place of residence, age and gender, some important aspects of the pattern of population ageing in the state becomes apparent. The number of elderly persons (60 and above) in rural area is much higher than the number of elderly persons in urban areas according to the census reports. Total number of rural elderly population is 1941359 which is 93% in comparison to the urban population which is 137185.

In light of above we have conducted a study in three different blocks under Kamrup (Rural) District, Assam. The study focuses on the Socio-Economic condition of the rural elderly population. It looks into whether the person still retains that amount of respect and consideration of his or her values when he or she was young and active or from a provider to that of a dependent. It also tries to understand the level of financial security among the rural elderly as it is seen that in most cases their successors become decision makers in every aspect.

The study also tries to understand whether there are any opportunities for employment at their locality and at the same time also tries to figure out potential economic activities for rural elderly.

Since health is an integral part of livelihood this study aims to identify the health issues as well as the habits and its impact on rural elderly population.

Methodology

This was an exploratory cross-sectional study. The sample was selected from three development blocks under Kumrup District, namely Chhaygaon, Boko and Chayani Bordwar. We have selected 2 no. of villages under Chhaygaon Block, 2 no. villages from Chayani Bardwar Block and 1 no. Village from Boko Block. From each village 20 number of beneficiaries has been interviewed making total sample of 100. Out of the 20 elderly in one village five are women. Selection criteria were- Resident of the village, age 60 years and above, below poverty line family, and Schedule Tribal (ST) by cast. Data was collected using a pre-tested questionnaire as well as CASP-19 validated questionnaire for quality of life of elderly. Verbal consent was taken from the individual as well as community consent was taken from the village head.

Results

Data consisted of 76 men and 24 women. Mean age was 69 years, 53 % of the beneficiaries are literate and 22 could complete primary and 9 could complete secondary schooling. Average reported income of the household was 2540 per month. All of 100 participants had agri-land with average land holding 38 Acres. Among the participants 52 had bank accounts, 6 had ATM cards, 7 had Aadhar card, 44 had PAN, 9 had mobile, 7 had life insurance, 13 had health insurance (govt scheme), none had PF or PPF, 12 had pension (govt scheme). Regarding awareness of the Govt schemes for elderly, only 22 know about the special clinic for elderly in PHC/ CHC, only one knew bank related schemes; 25 knew about the travel concession, 7 knew about insurance scheme and 5 knew about age assistive devices scheme.

Regarding self-reported chronic (more than three months) health complaints, Prevalence of Non-Communicable diseases like hypertension, diabetes, cancer, other heart problems, kidney problems were lower than national averages, however prevalence of eye, hearing and dental problems were quite high. Prevalence of most of the musculo-skeletal problems were high. Only 10 were on regular medication and their average monthly expenditure was 1278 INR. As private health care services are minimal, dependency on public system is high. Average distance to nearest PHC is 12 KM

Discussion and Conclusion

Status of the tribal elderly in this region is affected by poverty and harsh lifestyle. People in Assam, still largely depend on nature for livelihood and there are no financial support systems like other developed areas, especially for elderly. Welfare schemes can act as a cushion but the access is compromised grossly. Burden of various treatable diseases is quite high and due to not effective specialty health care at grassroot, elderly continue to suffer. There is a need to focus on this vulnerable section of society and implementation of welfare schemes need to be improvised to a greater extent.

A Field Report on Comprehensive Elderly Care Program for Rural Population

Shrikant Kalaskar, Sonal Sawardekar, Saraswati Padmanabhan, Sugandhi Baliga, Tata Trusts,
and Janseva Pratisthan, Yavatmal

Introduction

The epidemiological transition has led to steep rise in chronic diseases among the age group of 60 and above. Understanding the growing healthcare needs of the aging population and strengthening government health systems is crucial to serve the elderly. 'National Program for Healthcare for the Elderly (NPHCE)' is a vital program towards that. There was a need to strengthen NPHCE and effectively engage the beneficiary. This paper highlights the details related to the designing and implementation of a pilot project which is supported by Tata Trusts and being implemented in the rural areas of Maharashtra, Telangana and Karnataka.

Methodology

The project is being implemented in one district in each of Maharashtra, Telangana and Karnataka state along with the respective state health departments. The program team is actively involved in capacity building of the staff towards elderly care, monitoring and supportive supervision of geriatric clinics at PHC and CHC levels. At community level team has been appointed who creates awareness about various issues of elderly and geriatric clinics at PHC / CHC level. Tata Trusts has added social component to the existing health component in NPHCE for effective implementation of the program. The team also supports and guides community to create spaces for elderly to spend time and interact with each other called as "Activity centers for Elderly". These activity centers conduct activities like Prayers, Yoga, Meditation, Simple Physical Exercises, games and occasional health awareness sessions, talks and role plays.

Results

In the three districts of three states total 142 Medical Officers, 964 paramedical and community health workers have been given training in Elderly Healthcare. Since, August 2018 as per the NPHCE guidelines, the weekly geriatric clinics have been initiated at 33 out of 58 PHCs, 11 out of 13 SDH/RH in Chandrapur, Maharashtra, all the 18 PHCs and two CHCs and one area hospital of Medak, Telangana and four PHCs in Yadgir, Karnataka. In-total 26,450 elderly are screened for various health issues in these weekly clinics at PHC and CHC level, and 55,740 outpatient consultations given till August, 2019.

At village level 10 Elderly Activity Centers has been initiated in Chandrapur, Maharashtra and eight activity centers are operational in Medak, Telangana. In view of keeping these centers sustainable village gram panchayat spaces are being utilized for running these centers and ASHA worker / village volunteers are managing those. The activities in these centers run four days a week for 2 to 3 hours per day. Total 246 elderly have been registered in 18 activity centers.

Discussion

The aim of this project is to build a model to showcase proof of concept for the elderly care and come up with a comprehensive model that addresses the health and social needs of an elderly in the rural areas. Also create awareness and sensitize the community towards various

problems faced by elderly and involve them towards betterment of their elderly through community engagement activities. This project is successful in bringing the attention of state health departments on elderly care issues in rural area, Telangana state has started implementing the NPHCE program in 20 districts after the successful implementation in Medak. Maharashtra is also keen on expanding the program to all the districts from next year onwards.

Status of elderly welfare programs in Uttar Pradesh, a study from Badohi District

Anand Pandey, FARF

Introduction

Uttar Pradesh is the most populous state of the India as well as the most populous country subdivision in the world. It represents more than 16.3 % of Indian population. As per 2011 Census, there are 15.44 million elderly in Uttar Pradesh (UP), out of which 12.44 million are living in rural areas. This is one of the most underdeveloped states in India and also the public health system is not functioning optimally. The state also has the highest number of elderlies. It is important to examine the health problems faced by these elderlies and understand their hurdles in availing benefits of various public schemes for their health, protection and welfare.

Methodology

This was an exploratory cross-sectional study. The study was conducted in six villages in three blocks of Bhadohi district of UP. People above 60 years and having BPL card as a proof of belonging to poor section of society. From each village around ten elderly people were selected making total sample size of 59. It was a convenient sampling but care was taken to incorporate women and lower casts to understand their perspectives. Data collection was done using a semi-structured interview schedule and one validated tool to measure quality of life (RAND 36 tool for QOL). Verbal consent was taken as elderly people in this rural area are reluctant to sign/thumb print any document.

Results

The data consists of 38 men and 22 women with mean age of 66.8 years; 5 general, 18 OBC, 36 SC category people. 31 had no education, 7 had primary and 20 had secondary level. 28 had Kachha, 25 had pakka and 6 had semi-pakka houses. None had any pension or secure monthly income source. Most are supported by children and their own agrarian activities. Overall this was a section of society which lives with deprivation. Among the participants, 54 had bank accounts, 12 had ATM cards, 27 had PAN cards, 36 had mobile, 11 had internet on their phone. None had health insurance or PPF or PF. Only one had life insurance.

Among the participants, people self-reported following chronic (more than three months) health problems ; 7 – hypertension, 4- diabetes, 1- cancer, 18- cough, 23- breathlessness, 31- eye problem, 13- hearing problem, 40- general weakness, 2- heart problems, 24- acidity/digestion, 21- constipation, 18- low back pain, 13- neck pain, 20- shoulder problem, 36- knee pain, 32- multiple joint pain, 17- dental problem, 13 – numbness in some extremity. All the elders have one or more chronic health complaint but only 63% said that they are on regular medication and only 56% elders are getting treatment in some hospital. There was a major lack of awareness about Government initiatives like Ayushman Bharat Yojana. Around 49% elders were not getting benefitted by old age pension and 47% are not aware to special clinic for elderly at PHC/CHC/District Hospital etc.

Discussion & conclusion

Elderly are burdened heavily with health problems but they are not aware about various health related schemes for elderly. Due to compromised access to health and poor availability of health care services, Quality of life of the rural, poor an elderly appears to be lower.

The burden of age: understanding the perspective of elderly from vulnerable sections of Rajasthan

Abhijeet Jadhav, VikasAnvesh Foundation

Introduction

Rajasthan has 7.5% of population (5112000) 60 or above and 76.76% of them live in rural areas. Old age adds another layer to the vulnerability specially for rural poor, especially in resource poor areas of Rajasthan. Health and access to health are among the most affected basic needs in older age. There are number of government schemes, but their efficacy is not yet established. This study tried to understand major hurdles to access welfare schemes for elderly and burden of health problems among them.

Methodology

It was a cross-sectional study done in 84 villages in four districts of Rajasthan. From each village five to 25 elderly were selected depending upon weightage of elderly population, making the total sample size 1266. Inclusion criteria was age above 60 years. Data was captured through pre-tested questionnaire which was filled by trained Masters' students of IIM- Udaipur. Care was taken to incorporate all the casts, classes and sections in the villages. Verbal consent was taken from each participant. Data analysis was done from the gender and cast perspective.

Result

The overall status of elderly in terms of availability of basic needs, amenities, financial security and autonomy was very poor. Women compared to men had significantly lesser enrolment in the basic entitlements like- bank account, PAN, Aadhaar and had letter enrolment in the welfare schemes like health insurance, life insurance, old age pension schemes. Similar analysis from cast perspective clearly showed that OBC, SC, ST has lesser enrolment into welfare schemes even though their needs are higher compared to general category elderly. Elderly in lower casts face higher burden of under-development.

Burden of Age-Related Diseases (ARDs) was quite high among the participants. The prevalence of most of the musculo-skeletal disorders were significantly higher among women. Prevalence of respiratory problems and bad habits like tobacco use, and alcohol consumption were significantly high among men. Higher number of elderlies from General and OBC category were on regular medication compared to SC and ST. This hints towards relatively lesser diagnosis and access to regular medication among SC & ST categories.

Discussion

Elderly are vulnerable; and gender and lower cast adds to the vulnerability. Elderly are heavily burdened with ARDs and have higher barriers to health care. Burden of various health ailments was higher among lower sections of society. This is likely to be due to harsh working and lifestyle conditions as well as low social determinants.

Welfare schemes has potential to deal with many problems of elderly. To avail the benefits of government schemes, enrolment into basic beneficiary list and related platforms is crucial. But it was seen that such enrolment was very less among elderly, more so among women and lower casts. This is a major reason for improper utilization or limited impact of welfare schemes for elderly.

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CHALLENGES FACED BY THE GOVERNMENT IN SERVING SCATTERED AND DISENFRANCHISED GROUPS



Challenges faced by the Indian State in serving scattered and disenfranchised groups with special needs

Sanjiv Phansalkar, VikasAnvesh Foundation

Concept Note

The nomadic groups like banjara, bharwads, nat etc. are small, scattered and mobile. Development levels among them are quite poor. Particularly vulnerable tribal groups have remained more or less in the 19th Century ever since. Persons with disability in rural India; particularly with mental disability, though far more numerous than above two, are not only invisible but till recently more or less out of the purview of any formal action save some pensions or welfare schemes. There are millions of destitute women cast away by families and society. It is moot if all children without adult protection find care in homes. Each of these categories belongs to a class of people. For the sake of specificity, the class is named “Scattered and Disenfranchised Groups” (S&DG).

Features that characterise this class are as follows. (a) The number of individuals in the class is small concerning the total number of people in its social milieu. (b) the individuals of the class are scattered over a wide geography. (Perhaps smaller groups of PVTG live in compact areas, but when viewed together the 27 lakhs PVTG are scattered in 11 States across the country.) (c) In none of their locales are their numbers strong enough for any efforts to consolidate and mobilise them significant. (d) they lack the savvy and the skills to negotiate their way in the world to eke out a decent existence or the capacity to navigate their way in the administration run by the State apparatus. (e) Civil Society actors are the principal groups taking interest in the well-being of these people.

Academics and civil society actors often look at the issues concerning sub-categories within the S&DG class. They tend to delve deep into specific problems and challenges of that category. For instance, regarding PVTG, attention is focused on their poor condition caused by remoteness, primitive farming techniques and conflicts with ecology conservation groups and with Forest administration. When dealing with PwD, the issues looked at relate to stigma, insensitivity of the families, superstition, lack of access and incomplete efforts to make facilities “disabled friendly”. When engaged with destitute women the focus shifts on issues like domestic violence, superstitions like “Dayan persecution” (witch-hunt) tradition, their property rights, safety and infringement of their personal space.

However, the structural and process problems and challenges faced by the State apparatus in engaging with these categories are not studied. These problems and challenges of the State apparatus are as, if not more, responsible for the continuing woes of the S&DG as the issues specific to each of the category.

It has been instructive to focus on structural and process problems and challenges faced by the sections of the State apparatus engaged with each of these categories and look at patterns that are common to these challenges and processes. There are established theories of bureaucracy and of organisation which can be applied as now we do have at least the outline of the basic pattern. The study could contribute to both knowledge as well as to improve practice within the state apparatus.

Abstracts

“How can the crippled Government process serve persons with disability”

Kailas Kokare, VikasAnvesh Foundation

In Maharashtra, persons with disability, and in certain cases, their escorts are provided with transport at zero or concessional prices in the buses run by the State-owned Maharashtra State Road Transport Corporation. To avail of this facility, the concerned PwD must obtain a Concession Pass that certifies her eligibility to the facility. This note describes the process which needs to be followed to obtain this pass.

The note states that there are 8 pre-requisites and stages through which an applicant needs to navigate to get the above concession finally. Some of these steps, such as getting an Aadhar Card or Birth Certificate, are one time actions. They are also useful in a very wide range of applications and procedures throughout life. Some others, however, are specific to obtaining a valid authorisation for concessional transport. The note describes how a potential beneficiary must visit a number of offices; often away from his place of residence in a village and make application or satisfy conditions for the eligibility. These procedures are arduous if the applicant is mobility impaired. The note also argues that due to the usual issues in administration: officers on duty called elsewhere, officers on duty overloaded or engages in work deemed to be of higher priority; difficulty in transport schedules matching office timings etc. multiple visits entailing expenses and loss of wages for the guardian of the PwD are caused. This note, therefore, argues that even in such an obvious instance, the complex procedures lead to a situation in which only a small number of persons; who are located closer to seats of administration or those who can engage services of intermediaries and touts; can benefit. The note ends with a suggestion about simplification of the procedures and elimination of repetitive or superfluous documentation.

A Care-less State: Status of Persons with Disabilities and access to benefits in rural Rajasthan

Jayapadma RV and Kailas Kokare, VikasAnvesh Foundation

1.56 million persons with disabilities, which is 5.83% of the 26.8 million persons with disabilities in India, reside in Rajasthan. As with the rest of India, in Rajasthan too, more number of disabled persons reside in rural areas than in urban areas.

In February 2019, a study was undertaken by a few students of IIM Udaipur, as part of a Rural Immersion Program in the Course on Indian Social and Political Environment. The key objective of the study was to understand the status of people with disabilities in rural areas of Rajasthan and their access to various government schemes and support.

50 persons with disability and their families across 10 villages in rural areas of Udaipur were interviewed as part of the study. The study revealed that a large number of Persons with Disability, over 60% are illiterate. Overwhelmingly, 82% of the PwD work, 66% of them in agriculture and livestock care.

Rajasthan is one of the leading states in issuing UDID; however, it appears slow in reaching the villages surveyed. Only 38% of the respondents (18 men and 1 woman) had got Disability Certificates, and only 10% (5 men) have got UDID cards, pointing to the fact that penetration of UDID in rural areas is slow.

PwDs and their families, as well as representatives of local governments, have limited awareness of schemes and benefits available for PwDs. Most of them are left to their own devices and consider it their fate. A majority of PwDs interviewed shared that they have no aspirations, except to be treated with dignity.

Counting persons with disabilities, a pre-requisite to “making them count”

Jayapadma RV, VikasAnvesh Foundation

A person is defined as a person with disability if she has not less than 40% disability in any one of the diverse aspects (vision, motor, use of hands, hearing etc.) as certified by Medical Board. AAs per the data released by Department of Empowerment of persons with disability, there are about 26.8 million persons with disability in India. Of these 18.7 million live in rural areas. Locomotion impairment, hearing impairment and vision impairment account about equal proportion of this number and together make up for two-thirds of the total population of the PwD.

This paper argues that the above is an unverified count. After the list of disabilities included for defining what qualifies an individual to be called a PwD was expanded following passage of the Rights of Persons with Disabilities Act in 2016, no headcount of PwD has been done.

Government of India launched a program of issuing Swabhimaan Cards (also called Unique Disability Identity Number Card or UDID Card) in 2016 with the objective that PwD would receive all their due benefits and realise all their rights irrespective of their domicile and place of current stay. Of the 26.8 million PwD, the number of persons issued Swabhimaan Cards is about 5% as of March 2019.

This paper depicts the process and the mechanism for issuing Swabhimaan Cards. This paper notes that there are many administrative and procedural issues which lead to non-issuance or delays in issuing the UDID cards. Some of these are delays, hardships and corruption in issuing a Disability Certificate; which is among the chief requirement for issuing a UDID card. This, in turn, arises because of the complexity of the process and the need for examination by a panel competent in assessing the extent of disability.

The paper makes a strong case for arriving at a reliable count of persons with disability so that they can be reached and services provided to them.

The paper recommends that

- A cadre of village-level volunteers needs to be created (at Gram Panchayat level) and trained in early identification of disability to assist in speedy medical interventions to minimise the extent of disability and better quality of life;
- This cadre should be encouraged and motivated to assist PwD in rural areas in completing the formalities connected with issuance of a Disability Certificate as well as a UDID Card;
- Procedures adopted by Department of Health in examination and certification of extent of disability need to be simplified.

Understanding Government Mechanisms and Challenges faced by the Administration in providing welfare services to persons with disabilities in Maharashtra

Kailas Kokare, VikasAnvesh Foundation

Of the 26.8 million persons with disability, Maharashtra is home to close to 3 million. This paper addresses the issue of understanding the current administrative processes at work for reaching out welfare schemes to these persons with disability. The paper has identified 14 different welfare schemes relevant to the PwD and has recorded inferences from field-based study of the processes about how these reach the target population.

Commissioner of Persons with Disability within the Department of Social Justice of the Government of Maharashtra is the nodal office governing the program implementation. This office has the coordination, monitoring and oversight roles while the actual welfare administration is done through the Panchayati Raj Institutions. These in Maharashtra comprise the Zilla Parishad at District Level, Panchayat Samity at the Block/ tehsil level and Gram Panchayat at the village level. This paper records that there are 2 persons officially assigned the task of implementing the welfare schemes for the PwD at the District level. The expected load per implementing officer is over 41000 PwD. Thus grossly overworked, these staff members have to take recourse to voluntary or requisitioned help from social workers drawn from Government Special Schools (meant for PwD), or NGO run institutions meant for welfare of PwD or otherwise. Considering that the work locations of these persons so requisitioned may be away from seats of Zilla Parishad or Panchayat Samity and that systems of providing transport to them may often be inadequate, there is a lacunae in the system. The paper further records absence of adequate mechanisms of making welfare schemes known to PwD leading often to a huge waste of time and misdirected effort as potential benefits may approach with incomplete or incorrect applications.

The paper has identified seven main challenges in administering the welfare measures for the PwD. These are:

- Absence of any designated person responsible for welfare of the PwD at village level;
- Gross work overload on staff designated for the purpose at District level;
- Policies that do not adequately promote integration of PwD with the mainstream;
- Inadequate budget and little efforts at publicising the welfare schemes or making them known to target population;
- Lack of data on numbers of PwD and beneficiaries reached for monitoring progress at Block or district level;
- Reliance on collaboration from Special Schools or NGOs for implementation without any provision to compensate them;
- Insensitive orientation and inadequate experience of officers at Commissioner's office with the task of welfare of the PwD

Challenges faced in the implementation of UDID (Unique ID for Persons with Disabilities) scheme of Department of Empowerment of Persons with Disabilities,

Nikhil Tripathi, Transform Rural India Foundation

According to Census 2011, there are 2.68 crore Persons with Disabilities (PwD) in India (2.21 percent of the total population) . In an attempt to create a National Database for PwDs, Department of Empowerment of Persons with Disabilities has been issuing a Unique Disability Identity Card (UDID) to each person with disabilities. Data available from the Union Social Justice and Empowerment Ministry shows that a minuscule percentage, i.e. 7 per cent of the total 1.44 crore PwDs having Disability Certificates (DCs) have been issued the UDID cards. In this paper, the focus has been to identify the challenges and issues faced in UDID generation by the involved stakeholders such as beneficiaries, dependents, medical staff, welfare department officials, political representatives and other ground-level functionaries related to the scheme. The detailed study has been conducted in one of the districts with nearly 11000 PwD population in Jharkhand state where UDID scheme has been initiated in the first phase of the programme. The research was conducted on the basis of qualitative data based on the conversation with these stakeholders and quantitative data available from the departments.

It has been found that the challenges faced by administration in the generation of UDID cards is linked to lack of dedicated, skilled staff at the district level for data collection and verification of applicants. Another important reason is the lack of funds for awareness and required IT infrastructure to facilitate the program at the district level. UDID certificate is not mandatory for availing any direct benefits for PwDs whereas Disability Certificate is. Hence, the demand for DCs is much higher among people than that of UDID. The research suggests and implements steps which can be taken to speed up the performance in the UDID scheme. Increased focus on awareness generation, data collection with the help of Anganwadi Sevika, data entry from the block level operator and fast track verification from District health department can lead to increase in performance for the success of the program. For an increase in the number of people applying on their own, UDID can be mandatorily associated with the existing schemes such as Indira Gandhi National Disability Pension Scheme (IGNDPS) and Swami Vivekananda Nishakt Swalamban Protsahan Yojna.

Challenges experienced by bureaucracy in reaching welfare to scattered and disenfranchised groups (S&DG): A cross-sectional study in Jharkhand specific to Particularly Vulnerable Tribal Groups (PVTGs)

Mihir Sahana, Sarva Seva Sangh

The scattered and disenfranchised groups (S&DG) describe a group of people who are stripped of their power, scattered and with special needs. It includes different types of groups like nomadic groups (Banjara, Bharwads, Nat etc.), Destitute women, Persons with disability (PwD), Particularly Vulnerable Tribal Groups (PVTG) etc. The current study had considered the last category, i.e. PVTG.

PVTGs are one of the most exposed communities among all tribal groups and need special attention, as it has some basic characteristics like- primitive traits, backwardness, homogeneity within a small population/community, physical isolation, absence of written dialect, pre-agriculture level of technology, stagnant or declining population, subsistence level of economy and a slower rate of change. The state of Jharkhand is home to PVTGs, who are spreading over 2931 Hamlets of 126 Blocks of all the 24 Districts of Jharkhand with a total population of 183814. There are eight PVTGs in the state, namely Asur, Birjia, Birhor, Korwa, Hill Kharia, Sauriya Paharia, Mal Paharia, and Savar. Absence of reliable database for these vulnerable communities is a matter of serious concern.

Few research studies were conducted to understand about socio-economic-cultural status of PVTGs, challenges being faced by them, issues of their stagnant or declining population, etc., focusing mainly on the demand side. Based on the findings of those studies, it is understood that government welfare is not reaching/accessed by PVTGs as compared to other segments of the society. The present work desired to take it a step ahead by understanding the other side of the coin, i.e. the supply-side challenges. And hence, the study was focused only on the challenges experienced by bureaucracy/government in reaching welfare to such groups and finding its probable solutions/recommendations.

To keep the study guided and directed, few key indicators were selected and examined to achieve the aim of the study like Food Security (through PDS), Social Development (Institutional development), Health, Awareness about rights and entitlements, Livelihood (Agriculture/Horticulture/NTFP), Financial Inclusion, Skill Development, Drudgery reduction, hygiene, education. Along with that the study also reviewed few welfare schemes dedicated to PVTGs like Dakia Yojna, Birsa Munda Awas Yojna, Janshree Yojna. Based on the above-selected parameters, the study team interviewed concerned departments and officials.

Challenges Experienced (Findings of the study)

- Logistic Challenges:- Habitations of PVTGs are scattered and remote. Hence it is difficult to manage logistics for providing them benefits. Mobilisation of larger number of people is difficult as their habitations are scattered. Lack of proper road connectivity is a key issue. (*Remoteness of habitation, scattered habitation, Lack of proper road connectivity*)
- Communications problem:- PVTGs are very shy and it is very difficult to establish communication with them, as their language is also not known to the facilitators (*Language Barrier*)

- Mediators have access to such villages and they buy their produces at a very lesser price. Despite of that villagers sell their produce which was supposed to be stored by them for their consumption. This problem has recently started in few villages. And this is hampering the overall objective of ensuring food security of the PVTGs (*Middlemen Influence*)
- (Lack of coordination among various departments, stakeholders, NGOs)
- (Lack of proper community need assessment, Lack of involvement of PVTGs in designing interventions)
- Lack of Proper Information about PVTGs (Demographics), Discrepancies in available information
- Gap in link between PVTG villages and project office. Village level cadres act as the intermediary link between PVTG villages and project offices. And their roles are very critical in all stages of reaching welfare to the community.
- Lack of human resources in TRI and untied fund for development of PVTGs in departments



Mental Healthcare in India Today-Challenges in Scaling up services

Tasneem Raja, Tata Trusts

The lifetime prevalence rate of persons suffering from mental health issues is over 13%, translating to about 15 cr patients in the country. The health issues counted in this include both severe mental disorders (SMD), common mental disorders (CMD) and substance abuse. By clinging to the old mindset of undermining or neglecting mental afflictions; at least the CMDs and not fully overcoming the stigma seen as attaching to families of patients of SMDs, the Government as well as the society are desperately trying to remain in a comfortable if myopic denial mode.

The capacity to provide care is severely limited as of now. The Mental Health Care Act notified in 2019 is compliant with the requirements of United Nations Convention on Rights of Persons with Disability (UNCRPD) and is thus a model legislation. However, mechanisms to give effect to the provisions of the Act are very limited. The Act provides for mental health care at the Community Health Centres (third layer of healthcare in rural areas, after Health Centres at village cluster and Primary Health Centre at cluster levels). However, these Centres are not equipped to handle mental health patient load as of now.

There is a huge deficit in trained personnel as expected by the MHCA 2019. Based on international guidelines, India will need an additional 30,000 psychiatrists, 37,000 psychiatric nurses, 38,000 psychiatric social workers and 38,000 clinical psychologists. What we have currently is 9000 psychiatrists, 2000 psychiatric nurses, 1000 clinical psychologists, and 1000 psychiatric social workers. Even assuming that total population and patient load to remain constant, it will take decades to train adequate number of these professionals if the action of the State is to match the pious intentions of the MHCA 2019.

Institutions providing mental health care (popularly known as Mental Hospitals) are designed to treat and care for patients of SMD. These too are fewer than needed and inadequately equipped in almost every respect.

Whether while dealing with creating more training centres for preparing professionals needed as noted above or while dealing with expanding the capacity of institutional care, budgetary allocations appear to be the chief constraining factors. Life-threatening communicable diseases and rampant NCDs appear to occupy the attention of the policymakers. While the country has passed a Model Act to appear to be keeping pace with global standards of care, the country will need to play catch up for decades before a realistic claim of providing reasonable care can be made tenable.

Stakeholder Consultation: to understand issues of Persons who are disabled consequent to a Motor Accident

Shaswati Ghose and Shiwa Brata Ghose, Consultants Ranchi

Executive Summary

Accidents arising out of use of motor vehicles are a motor accident. They may result in death on the spot or in course of treatment, and disability (temporary or permanent) of the driver, owner, passengers including those travelling in excess of the authorized carrying capacity of the vehicle, persons on other vehicles or on the road at the site of the accident apart from damage to vehicles/other property. All matters about motor vehicles in India are governed by the Motor Vehicles (MV) Act 1988 (as amended) under which Motor Accident Claims Tribunal (MACT) is constituted.

Methodology and limitations

This paper is based on discussions with stakeholders – in motor accidents conducted in September end early October 2019. A limited number of respondents across various stakeholders were consulted. They were – victims or their family, perusal of two fresh cases for specific situation of lack of insurance cover, truck drivers, police in two police stations and Superintendent of Police Simdega, welfare/social welfare/ social justice officials, doctors and personnel at Sadar hospital Simdega, the advocates of victim and of insurance companies at court, and insurance investigators mainly at Simdega and some at Ranchi (second author is Surveyor). The limitations in this approach include the fact that this process does not include concerns of persons who did not move MACT. Jharkhand witnesses a lot of migration but this paper does not include problems of migrants who meet with an accident in their place of work. The paper draws on the experience of the first author in MACT. This paper does not make use of secondary information like the National Crime Records Bureau (NCRB), as the scale of motor accident issue is not relevant to understanding its impact on specific PwD. Also, not all motor accidents, including sometimes serious ones, do not result in the filing of a police report that is the basis of NCRB data.

Disability certification

To access compensation for motor accident commences the disabled person has to appear before the District level Disability Certification Board (locomotor, eye, ENT, hearing and speech and mental) constituted for reviewing and which issue certificate indicating the extent of disability. In the case of Multiple Disability, the final disability certificate is issued by the Disability Board, which awarded a higher score of disability. A permanent disability certificate's validity is 'Permanent' and victims are entitled to compensation for loss of income and quality of life in addition to reimbursement of medical expenses and pain. However, the issuance of the certificate itself does not assure commencement of any benefit on its strength. The holder has to proactively apply – for disability pension, for ration under disability quota if not otherwise eligible for the right to food, apply for compensation under section 166 of MV Act.

None of the disabled persons or their family in Ranchi and Simdega who we talked to had heard of Swawalamban card or Unique Disability Identity (UDID). The process requires the applicant to register online and then the Civil Surgeon office will validate the disability certificate

mentioned therein and only then the UDID card will be sent vide post. This approach bears no consonance to report of internet penetration in the rural areas. The UDID's website site itself has no pull factor – it does not even provide any worthwhile information relevant to a person with a disability in Jharkhand. Swawalamban card, as of now, is more an exercise of identifying numbers of disabled persons at the national level – a national census

Motor Accident claims are of different types

No-Fault Liability earlier was a separate chapter where claimant did not have to prove the fault of owner or driver of vehicle for getting Rs. 25000 in case of grievous injury and Rs. 50000 for death. This provision continues. However, in Third-party claims (chapter XI) amended section 164 provides for no-fault liability claim of Rs. 2.5 lac for disability injury and Rs. 5 lac for death but with cessation of the application under section 166 of MV Act.

Other third-party provisions are: *Hit and Run motor accident claim* - section 161(1) (b) (chapter XI) – where the identity of the motor vehicle cannot be established. For accidents resulting in minor injury: fixed compensation of Rs.20,000. For fatal accidents: fixed compensation of Rs.5 lacs and for disability the range is in the proportion of disability into the amount.

For Fault liability - Section 166 (chapter XI) – claimant under this have to prove the fault of the identified vehicle's owner or driver at the time of the accident. For Sec 166 often claim amounts are high due to loss of income. If no liability claim under sec 164 is taken, this right is forfeited. For such claims, the MACT levy fee as per Bihar Motor Rules and there are cases awaiting admission for filing of fees in courts acting as MACC, while MACT may take a more liberal view. Our stakeholder consultation with victim shows compensation applications were filed 14 to 60 months after the date of the accident is there in the filing of even the case under section 140 (sec 166 often follows after its decision). The PwD may have spent even 10 months in the hospital itself. A statutory limit of six months to filing application under this section was removed in 1994 to ameliorate hardship. In 2019, the period allowing for filing under this section has been inexplicably limited to six months again with no provision vesting power on MACT for condoning of delay.

Problems with the filing of Motor Accidents Claim

- In Simdega by one estimate, some 20 per cent of claims are being filed in MACT courts in Rourkela/Ranchi. The lawyers of those courts persuade claimant that with the presence of insurance offices chances of success are more. Such lawyers or their representative proactively reach the claimant it or the next day of the accident. Barely 10 per cent claims for accidents are filed in Simdega by same estimate. Despite this few all litigants are filing case even while amendments in section 166 are changing the long-tailed character of MACT applications. Some are not reached by lawyers seeking commission since they are remotely located, the quantum of injury reported in news report does not hold potential for claims, or there is no insured vehicle involved.
- As per Sec 166(4), the Claims Tribunal is meant to treat any report of accidents forwarded to it by police under section 158(6) as an application for compensation under this Act. Supreme Court opined, the “object of Section 158(6) read with Sec 166(4) of the MV Act is essential to reduce pendency of claim case and quicken the process of determination of compensation”. The police in Jharkhand as learnt in Simdega since the new Jharkhand Motor accident rules are submitting such report of the accident to MACT when the vehicle has been identified and to the District Transport Office when it is a hit and run case with

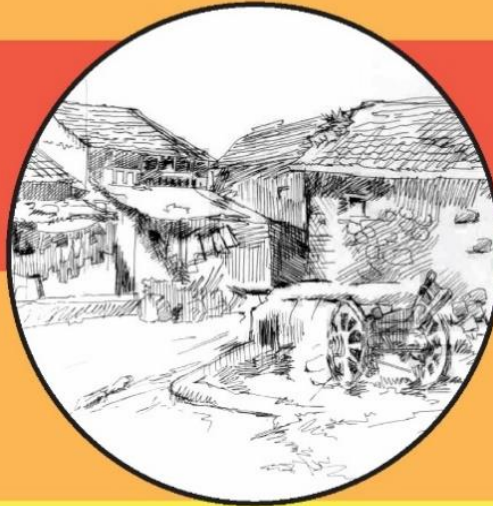
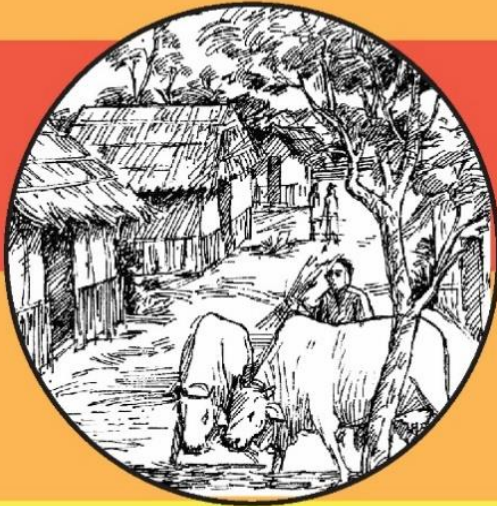
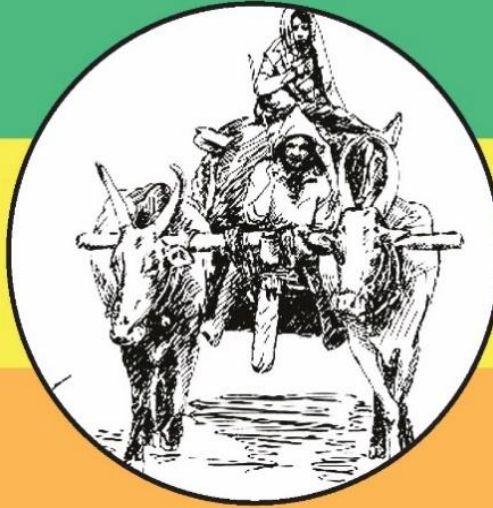
no offending vehicle identified. However, the copies are not provided to the victim since the rules do not require. The authors have read a few hundred case files pertaining to claims for compensation following motor accident and have never seen in Jharkhand any case note sheet indicating the case was instituted on intimation by police. In every case, an advocate presented the application. MV Act does not mandate proactively providing any documents needed for filing of case to the victim. The FIR is a critical supporting document to initiate MACT case under sec 140; further charge sheet is also needed to file for a claim under section 166 and these must be obtained from court where the criminal case was instituted. The Investigators also struggle to get papers of the vehicle since their certified copies are not available in criminal or MACT case and hence, they cannot be officially obtained.

- Given the beneficial nature of the claim's provisions, the investigator's report should become a statutory document brought on court's record in MACT. It cannot be a document to guide the insurer only to deny liability but also aid the claimant to assert what he should claim.
- Most victims and attendants do not know about motor accident claims or provision for reimbursement of hospitalisation expenses and do not file a claim unless approached by a lawyer. Even when so approached, they cannot produce all the bills since they were not warned to preserve the bills they did get. Expense reimbursement for treatment is only against bills, out of pocket expenses for food of victim, attendant, travel, hiring of vehicles are not reimbursed usually in the absence of bills. A cash outlay parameter is needed for expenses as well even when treated in government hospitals.
- Even earlier, when the claim value was known to be high under sec 166, the insurers pressed for settlement through Lok Adalat but could not do it when only sec 140 application was filed. However, this helped to cut the insurer's losses. One 100 per cent handicapped rendered paraplegic who filed for compensation in 2012 received only Rs 3.5 lac as compensation (after lawyer collected Rs. 1.5 lac). This appears inadequate considering the need for another person to nurse him, or interest due. The 2019 amendments include proactive provision for settlement of insurer with third-party claimant, but there are no methods of educating the claimant or aiding him. Old definitions of a family continue even when grandparents survive and are dependant on the deceased grandchild who was an adult.
- While statutory provision on Golden hour provisions will protect good Samaritans who ferry a victim to the patient and not be harassed but beyond that will do little in preventing disability. There is no trauma care or oxygen administration feasible at the site of the accident as ambulances are not equipped. Often they must be moved to the tertiary care government hospital. There is no provision to counsel the injured to adjust to life after accident nor expenses reimbursed.
- Even after the accident and injury are proved, settlement of the claim is delayed as insurers resort to grounds like Proximity Insurance (where the existence of valid cover of insurance is doubted as insurance commenced close to date of accident). In case of uninsured vehicles, friends travelling on the defaulting vehicle do not get similar protection like a motor third-party if no second vehicle is involved. With permanent disability or death, it leaves their poor family further impoverished for no fault of theirs.

There is a need for case-based training of MACT presiding officials, police, government officials and doctors etc. to better understand the impact of the lacunae in planning and lending victims a voice in the planning. The problems of persons rendered handicapped through motor accident are many and cohesive planning is needed incorporating the feedback of claimants who have grappled with the system.

VAF

VikasAnvesh Foundation
An Initiative of TATA TRUSTS



Rainbow session

Research in development sector with connection to the grassroots is limited. In order to encourage evidence-based research for development, we also have research papers outside conference themes but with relevance to rural development.

Invasive Pest Management Practice – future of farming

Dr Rahul Marathe, Dr Abhijeet Jadhav, Vaidehi Dandekar and Dr Chandrashekhar Joglekar, Mitrakida Biosolutions Pvt Ltd, Pune, VikasAnvesh Foundation, Tata Trusts and TISS

Pesticide use has significantly transformed agriculture to increase the productivity taking care of food security. However, ill effects of pesticides are known to adversely impact human and other animals as well as the ecology and environment largely. Pesticides consumption in India has increased from approximately 14000 Metric tonnes in 1965 to close to 56000 metric tonnes in 2014-15. With this background, interventions of non-insecticidal pest management practices to minimize the risk of indiscriminate use of pesticides shall be conducted. Use of beneficial insects is known for ages. Multiple use of the insect predators during development of farm can significantly reduce the pest population and increasing the production and making residue free produce. Presently Maharashtra state stands largest consumer of pesticides with 11280 MT pesticide demand in 2015-16. Two villages from agro-climatic zones (NARP)¹ namely the Central Vidarbha zone (Yavatmal District) is selected for demonstration. In 2017, due to acute high-level exposure to monocrotophos, more than 30 farmers and farm laborers in Yavatmal district lost their lives and more than 600 had to take medical treatment. Non-Invasive Pest Management NIPM practices shall be role model for the farmers for low risk farming practice.

Methodology

Atleast, four farmers each shall be selected from the study area with written consent to do the demonstrations on their farm land during farming. As per guidelines minimum 4000 sq ft area shall be selected for the demonstrations from the farm. Prerelease analysis of crop shall be done and accordingly the release dose of beneficial insects decided. Weekly monitoring shall be done Yield shall be calculated at the end.

Pesticide Risk Assessment and Mitigation through Community Participation and Capacity Building

Dr. Chandrashekhar Joglekar, School of Habitat Studies, TISS, Dr. Abhijeet Jadhav (VAF) and Dr. Rahul Marathe, Mitra Kida

Introduction

Application of pesticides has revolutionized agriculture in India and has contributed significantly to enhance food security. However, pesticides are hazardous toxic substances that can adversely impact human health and environment at large. Several cases of acute and chronic pesticide poisoning have been reported from India. In most of these case, the poor and marginalized communities have been the victim. These various disasters remind us the gravity of the environmental health risk associated with pesticide. Despite of various rules, regulations and schemes, the unsafe, excessive and indiscriminate use of pesticides continues to be a serious occupational, environmental and food safety concern in India. This is a major challenge in achieving SDG3 (Good Health and Well-being) and SDG12 (Responsible Consumption and Production).

About the project

In this background, the Centre for Environmental Health, Tata Institute of Social Sciences, has initiated a two year participatory action research project in 2018 with an objective to assess the environmental health risk of agrarian communities due to exposure to pesticides using biomonitoring, and mitigate these risks by improving risk perception of the community and through development of plots to demonstrate utility of eco-friendly NIPM (Non Insecticidal Pest Management) practices based on introduction of 'Mitra-Kida'. The project is being implemented in two villages each in Umerkhed Block (Yavatmal District) and Dindori block (Nashik district).

Methodology

The study has three components. First is a cross sectional survey with participation of 400 agrarian families (100 from each village) including farm laborers. It will capture the pesticide risk awareness, attitude and practice among the farmers through real time 'pesticide diary' for each rabbi and kharif season. The data is used to develop risk profile of each participant. Second component is to validate the risk scores through biomonitoring of a sub sample of the study participants. From study population approximately 120 people will be selected with stratification of type of exposure (direct, primary, secondary) and risk score categories (viz. mild, moderate, high). Their blood samples during and post spraying season will be examined for the presence of pesticide metabolites. Third component is developing up to eight demonstration plots in selected villages to give a firsthand experience of 'Mitra-kida' NIPM method of pest control of, in a participatory research method.

Outcomes

The risk profiles of all the participants will be measured and will be validated using blood sample of few participants in each category. Later the findings will be communicated to the individuals and information of pesticide hazards will also be given to the villagers.

The farmers will also learn how effective and useful NIPM is and how to implement that in their farm set-up.

Studying the relationship of crime incidence with the police presence, unemployment and the per capita income in India

Shashank Deora and Sanjiv Phansalkar, VikasAnvesh Foundation

While thinking of crimes and their relationship with the police presence, *ceteris paribus* the police presence must reduce the crime rate. While several empirical studies, mostly outside India, support this hypothesis, there are other studies which do not find a clear relationship between the two. There are also evidences of a positive relationship between the police and crime and that an increase in crime rate leads to an increase in the police presence. This study is an attempt to explore this relationship between the police strength and crime rate in India. It uses state data on seven crime categories and compares it with the state data on police presence per lakh population and square kilometre for 2016 to determine this relationship. It also does a comparison across years. Results from the study indicate that the total cognizable IPC and SLL crimes reduce with an increase in the police strength per lakh of population. However, no such relationship exists with the police strength per square Km. For none of the seven crime categories under analysis, crime rates are in a clear inverse relationship with the strength of the police. Relationship of crime rates with NSDP per capita and unemployment is also at variance from the earlier research findings. Study results warrant the need for further research on this subject in the Indian context. It also flags the need for further research on criminal motivations which defy police presence.

Biofertilizer: A Path to Sustainable Agriculture

Sistema Biobolsa

In recent years, there has been an increasing interest in anaerobic digestion of farm and household residues in many parts of the world. Smallholder biogas digesters and community biogas plants can be found all throughout India. Anaerobic digestion produces two main outputs: biogas and bio-slurry (the digestate or digester effluent). While the biogas is used to produce energy, the large potential of bio-slurry has often been overlooked.

The majority of research has been conducted on the effect of bio-slurry use on different soil structure and fertility parameters, but implementing the research findings to farming practices has been a challenge.

Sistema.bio India is a social enterprise that provides smallholder dairy farmers with anaerobic digestion technology, service and financing that allows them to increase agricultural productivity and net income, while improving the environmental sustainability of their farms. With a focus on clean energy access and sustainable agricultural inputs *Sistema.bio* technology has been proven in hundreds of small dairy farms in India.

A Six cubic meter capacity *Sistema.bio* digester produces 135 Lit/bioslurry/Day which can fertilize 4.9 Hec of land. Biogas slurry consists of 93% water, 7% dry matter of which 4.5% is organic and 2.5 % is inorganic matter¹. The % of NPK (Nitrogen, Phosphorus and Potassium) content of *Sistema.bio* digested slurry on wet basis as tested by Pune Agriculture college, Maharashtra was 0.72:0.38:0.60 respectively. There could be a variation in the content of the bio slurry depending upon the quality of feed input in the reactor.

The bio-slurry of *Sistema.bio* digesters have the following characteristics:

- When fully digested, effluent is odour less and does not attract insects or flies in the open.
- It repels termites whereas the raw dung attracts termites, which can damage the plants fertilised with farmyard manure (FYM).
- Bio-slurry improves of the physical structure of the soil, increases soil fertility and increases soil water holding capacity.
- It has greater fertilising value than FYM or fresh dung. This because available nitrogen can be immediately absorbed.

Sistema.bio's technology and training methodology has proven impacts on crop yields for smallholder farmers in India. Our innovative training and bio-slurry management package for farmers achieve following tasks:

- Management of bio-slurry on a daily basis
- Monthly calendar of activities that will improve farm productivity
- Conscious and balance soil nutritional support
- Durable and healthy plant growth
- Production of high-quality green fodder

Research comparing organic and inorganic fertilizers provides compelling evidence that organic fertilizers bolster soil health over a long term. In a study conducted in Sweden over thirty-two years, Scientists ARTUER GRANSTEDT and LARS KJELLENBERG reported on the differences in soil structure and crop quality between organic and inorganic system. They found that soil in organic system had higher fertility, and organic crops had higher yields and starch content than the inorganic system.

In Sept 2019, in partnership with National Dairy Development Board, Sistema.bio has installed 370 bio-digesters in Anand District of Gujarat, and is training farmers to produce, use and sell excess bio-slurry to improve farm productivity and increase their household income for better life.

Understanding the impacts of Bathing Spaces on the lives of Women

Vaishnavi Pawar, VikasAnvesh Foundation

The need for enclosed and secluded bathing spaces is not felt in the Indian rural communities nor is it being promoted on a large scale by development agencies. While toilets have become the mascot for a clean India, another primary sanitation facility - the bathing space, has fallen through the cracks and remains elusive — perhaps because it is a less smelly issue, but more likely because it impacts the invisible gender. There is a severe lack of secluded bathing spaces, and the woman often is the primary victim. Women face problems like lack of safety, dignity, privacy and also face health problems like skin problems, joint problems, obstacles to efficient menstrual hygiene management practices. The purpose of the study is to understand the impact of such bathing spaces on a woman's daily life concerning her economic, social, health and behaviour aspects and explore and synthesise critical motivational factors for the construction and the eventual usage of the enclosed bathing spaces and bathing spaces related infrastructure. The study was conducted in villages of two districts – Betul (Madhya Pradesh) and Kharagpur (West Bengal). The sample was selected using purposive random sampling. The number of respondents from Betul and Kharagpur were 25 and 29 respectively. In Betul, half walled bathing spaces were provided by BAIF under the BRLF project. In Kharagpur, community bathing spaces were built by Tata Metaliks as part of their CSR undertaking. A semi-structured questionnaire was designed to understand the changes in the bathing infrastructure and bathing practices, the impact on the health of the women using the bathing space and the overall impacts on the social and personal lives of the women beneficiaries. Privacy and safety, while bathing is the benefits perceived by most of the women (93%) interviewed. Reduction in intensity and incidences of skin problems (54%) like Miliaria, constant itching was the health problem which was reduced after using the bathing spaces. Women perceived other health benefits are reduction in joint pain (31%) and back pain (30%), which was earlier caused due to crouching, and reduction in infections caused due to bathing in unclean water. Women could not maintain menstrual hygiene due to lack of privacy (54%). The incidences and intensity of such problems like itching near the genital areas (17%), excess coloured vaginal discharge (15%) and a burning sensation during urination (17%) have reduced. They can now practice better menstrual hygiene management practices. Given the reported benefits, the study has identified bathing as an essential WASH need for women. The bathrooms, coupled with toilets and water supply provided by the development agencies, have enabled the women's privacy and dignity, improved health, wellbeing as well as social status.

Aspirations of educated youth and barriers faced by them in higher education among Kolam PVTGs in Maharashtra

Gyanesh Nanore, VikasAnvesh Foundation

Maharashtra has a tribal population which is second largest in India. This includes 47 tribes having 3 Particularly Vulnerable Tribal Group (PVTGs). This 3 PVTGs includes Kolam, Katkari & Madia. Kolam is one of the PVTG found in Yavatmal District of Maharashtra with the total population of 194,671. The area inhabited by these PVTGs is remote and inaccessible having mixed forest cover and wildlife. There are many hillocks covered with dense vegetation. The villagers are scattered and generally do not exceed more than 70 families in a village. Education is considered as a crucial component for structural change in society. It is seen as the key instrument for bringing about a social order based on the value of equality and social justice. The State's special promotional efforts have undoubtedly resulted in educational progress for the STs, but restricted till secondary level. In Maharashtra, 51,495 people of Kolam/ Mannervarlu tribe has attended the school level education, but the figure for continuing higher education is very critical with only 3,805 people attending college-level education and only 958 people among attending vocational education (Census 2011).

The study aims to find the barriers and difficulties faced by Kolam tribe while going for Higher Education. The study also tries to assess different aspirations of Kolam youth which are Educational aspiration, Professional aspiration, Economic aspiration, Employment aspiration.

The study was conducted with a mixed method approach. The quantitative data of 69 students out of which 38 were males, and 31 were females, was collected from tribal residential schools and hostels across the five blocks of Yavatmal which are dominated by Kolam PVTG population. FGDs were conducted with the same set of students simultaneously to get qualitative inputs to study. There were 28 students of graduation level and 41 students of higher secondary level.

The findings suggest that with the aspiration of finishing education till graduation or post-graduation level in the art stream, most of the students are oriented towards Government jobs. The priorities are chiefly given to defence and police services. Teachers are playing a significant role in the career-related decisions and are the only source of information amongst the students. It is not the lack of opportunities, but awareness about the available opportunities that have emerged as the main barrier for availing higher education.

Social Audit

Meher Gadekar, Director, CGSAU, Raipur

Motivation/Purpose

The CGSAU conducts Social Audit of the works undertaken under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in each of the approximately 10,000 Gram Panchayats of CG. The author heads the Chhattisgarh Social Audit Unit (CGSAU), working as its Director. This is advantageous in two ways: firstly, he has easy access to a rich body of data & experiences and secondly because the findings of the research can be quickly used to improve the conduct of Social Audits in CG.

MGNREGS is a powerful rights-based scheme which addresses the Right to Work and has the potential to transform the rural landscape through offering unskilled wage labour to anyone who desires to work. The scheme is used to construct assets useful for the rural population and it also addresses the issue of forced/distress migration.

Topic/Title

Comparative status of Social Audit Process of MGNREGA in different Divisions of Chhattisgarh State with special reference to quantity, quality, utility/effectiveness, timeliness & fidelity.

Approach & Methodology

After the MGNREGA was passed in Parliament in 2005, different States of India began implementing it. The Chhattisgarh Social Audit Unit (CGSAU) was constituted in 2014 primarily with an objective to conduct Social Audit of MGNREGA in the State. Social Audits push for promoting Accountability & Transparency in public programs. This paper reviews the experience of CGSAU in conducting Social Audits for more than 4 years and draw lessons with respect to their efficiency & effectiveness. It reviews the data spatially (w.r.t Divisions) and temporally and looks for trends & patterns.

The research focuses primarily on analysis of secondary data which is available at the MGNREGA website & the CGSAU website.

Results/Conclusion

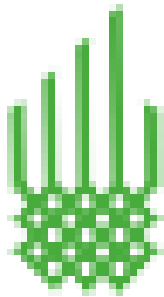
Besides producing a Paper at the end of the study, the results have the potential of being used to improve the conduct of Social Audit in CG. In addition, the study will also be of interest to other Social Audit practitioners and Social Audit Units in other States of India.

State of farmers and farming in India: Measuring socio-economic and ecological sustainability across the states using Farm Assessment Index

Siva Muthuprakash K M, VikasAnvesh Foundation

Traditionally, crop yield and total grain production has been the main focus of agricultural policies and technological interventions. Overemphasis on yield as a single indicator of agricultural production has resulted in several undesirable side effects in the long run. Numerous schemes and programs are being implemented across the nation with a range of objectives and benefits. In order to maximize the benefits of these schemes and programs, and reach out to appropriate beneficiaries, it is necessary to understand the state of farming and farmers in a holistic and context specific manner. Currently, the state of agriculture reports often focus on a few selected macro indicators but not on farm level and farmer centric indicators like risk, self-reliance, cropping preference etc. A holistic set of indicators are identified using a systems framework and a set of farm level and farmer centric indicators are selected. All the selected indicators are estimated using various publicly available secondary data and normalized using preset reference values for comparison across the states and crops. A meta-analysis of these indicators over a decade using random effect model help us aggregate the statistical evidence and understand various trends of these indicators in a region and crop specific manner. A multi-dimensional farm assessment index (FAI) is estimated for 24 crops across 19 states for a period of 10 years. The trends in socio-economic and ecological indicators reiterates the need for a paradigm shift in our approach for the long-term sustainability of agro-ecology and livelihood of the farmers.

Field Partners/ Collaborators



M.C.E. Society's
Abeda Inamdar Senior College
Of Arts, Science & Commerce, Pune
Affiliated to Savitribai Phule Pune University



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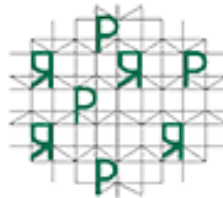


Science for Sustainable Development



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Notes

Notes

ABOUT THE CONFERENCE

Vikasanvesh Foundation (VAF), is a research centre established by the TATA Trusts. It works on issues which are of importance to the disenfranchised and the poor but which have received inadequate attention from the mainstream research community.

VAF is organizing its second annual conference titled "Rural India: Towards Inclusion of the Marginalised". It will be a presentation of research work done during the last one year by VAF staff and associates.

The conference aims to bring together researchers, policymakers, representatives of the civil society and media to discuss the important yet unattended issues facing the development sector. The research work presented in the conference has been conducted and executed in a multi-location format. Sessions in the conference will include presentations of the papers prepared by researchers; commentary by experts and views of practitioners.

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