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Volume 6



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Mahatma Gandhi National Council of Rural Education

Department of Higher Education

Ministry of Human Resource Development, Government of India



Where there is Rural Wellbeing
there is Universal Prosperity

About the Journal

Indian Journal of Rural Education and Engagement (IJREE) is a blind peer reviewed half yearly Scholarly Journal published by Mahatma Gandhi National Council of Rural Education (MGNCRE), formerly National Council of Rural Institutes, Ministry of Human Resource Development (MHRD), Government of India. The journal is basically intended to diffuse scholarly information on Academia Community Engagement/ Rural Engagement and its related issues such as Rural Education, University Community Engagement, Rural Tourism, Rural Entrepreneurship and Rural Communication. It publishes research and review papers, intended notes on Community Engagement and Education. It is intended to benefit the academia, policy makers, government departments and all others interested in Rural Community Engagement.

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Foreword

Mahatma Gandhi National Council of Rural Education (MGNCRE), Department of Higher Education in the Ministry of Human Resource Development, Government of India, brings out the Sixth issue of its Journal in the field of Rural Community Engagement and Rural Education to diffuse development research and scholarly information as part of meeting its objectives.

The blind peer reviewed Journal's scope has been identified broadly to cover the areas of Academia-Rural Community Engagement and Higher Education focusing on Rural Concerns. Areas covered include: Rural Education, University-Community Engagement, Rural Tourism, Rural Entrepreneurship, Rural Management and Rural Communication among other aspects of rural concerns. The Journal publishes research papers, review papers, case studies, including Notes on current issues of concern to the Rural Community Engagement and Rural Education sectors. Efforts have been made to identify potential authors and scholars who have been working in rural community engagement and rural education through the journal databases and the literature scan in the field. Request letters have been sent to the research institutes and universities in India and also to the individual scholars and academics to contribute their research manuscripts for publishing in the journal.

All the manuscripts received have been put for anti-plagiarism verification and those articles which have more than 25% of similarity have been sent back to the authors concerned to minimize and edit their papers. Further, those articles which were well within the limits of plagiarism have been sent to the identified Reviewers and Peer Reviewers to review and to offer their remarks on the papers about their worthiness and also to suggest any corrections needed in the paper before they are accepted for publishing. This is the Sixth issue of the Journal based on recommendations by peers. The journal includes research articles and caselets on rural concerns by academicians and management students from IRMA and XSRM. We have also included few caselets on Waste Management, a sector in which MGNCRE has made great strides through curricular and academic interventions.

The Journal takes pride in having eminent scholars, researchers and administrators on its Editorial Board. The Journal is intended primarily for the academia, policy makers, departments in the government and for all others interested in Rural Community Engagement and Rural Education. Majority of India still lives in villages and so the topic of rural education in India is of utmost importance. Further, we firmly believe that the Journal will meet the objective of disseminating the current developments in rural community education and engagement.



Dr. W G Prasanna Kumar
Chairman MGNCRE

Marginalisation of Santhals in Rural Economy of Bengal

Prof. Atrayee Saha

Abstract

The field work in Bardhaman District of West Bengal has been done for a period of one year. This paper is part of PhD thesis on Agrarian relations and agricultural development in West Bengal under the supervision of Professor Amit Kumar Sharma. Tribal groups in rural economy of Bengal are in dire need of developmental works. My fieldwork in two villages, namely, Paarhaati and Gangte of Memari II block of Bardhaman district show that the rural economy of Bengal is not only reeling under lack of agricultural development, but it is also affected by discrete division along caste and class lines where the dominant castes; the sadgops, enjoy an important position along with the aguris and the namashudras (to some extent) in the rural economy. In the rural economy, the worst affected is the social and economic condition of the adivasis, residing in the two villages of the district, who are mostly the santhals and work as agricultural and landless labourers. These tribal groups have migrated from the districts of Purulia, Bankura and Birbhum to settle in Bardhaman. These groups are mostly engaged in the agricultural occupation as wage labourers and are completely dependent on the local landlords and self-help groups for their financial requirements. In this paper, I have tried to point out the dynamics of the rural society and analyse the difficulties faced by the tribal groups by taking narratives of the landless labourers belonging to this group from the villages.

Keywords: agrarian caste, agrarian class, social inequality, dominant caste, agricultural infrastructure

Introduction

“The tribal people of India are a virile people who naturally went astray sometimes. They quarrelled and occasionally cut off each other’s heads. These were deplorable occurrences and should have been checked. Even so, it struck me that some of their practices were perhaps less evil than those prevailing in our cities... Speech delivered by Shri Jawaharlal Nehru at the opening session of the Scheduled Tribes and Scheduled Areas Conference in June 1952¹.

To a layman tribal population in India has a typical identity which has always segregated them from the rest of the ‘so-called’ civil society. While their ‘congeniality to the soil’, ‘their closeness to natural existence’ or ‘their untutored savage survival’, have been a form of

expression of beauty and difference of life and living from the ‘urban’ and ‘sophisticated’ product of modern world. Equally they have been relegated from the mainstream society by denoting them as backward and unwilling to development, as an important excuse for the lack of initiatives taken after Independence for their socio-economic and political revival. Rousseau’s ‘back-to-nature’ movement followed by the emergence of an attitude to life which has been valorised by the idea of ‘primitivism’ and studied in great details by the American scholars like, Lovejoy, Boas and Margaret (Elwin 1973: 12)², comes to a naught when reality of their existence comes alive. The tribal problem in India is a major problem which has remained unanswered since decades. The majority of the tribes in India live in extreme poverty and illiteracy. Their sustenance for some of the groups is still dependent on the forest plants and animals where they dwell.

¹ See the manual of *The Tribal People of India*, published by the Ministry Of Information and Broadcasting, Government of India. Published in July 1973. See chapter 1, “The Tribal Folk” by Jawaharlal Nehru.

² Ibid. see chapter 2, “Do We Really Want to Keep Them in a Zoo?” by Verrier Elwin.

Article 366 (25) of the Constitution of India has defined "Scheduled Tribes" as 'such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purpose of this Constitution'. According to the Constitution (Scheduled Tribes) Order, 1950, issued by the President in exercise of the powers conferred by Clause (1) of Article 342 of the Constitution of India, there are 255 tribes in 17 States (Datta-Majumder 1973: 21)³. According to the 2011 Census of India, 8.6% which is equivalent to 104 million people constitute the total tribal population in India. Out of this massive population, almost 90% of the tribal people dwell in the rural areas (Tribal Profile at a Glance, May 2014⁴).

Tribal groups in India can no more be limited to Elwin's perception of the 'primitive' people. This is evident from the fact that among its population it has achieved a high literacy rate of 59% in 2011 from 47% in 2001. However, their significant change in the literacy rate is not a marker of an extraordinary development in the socio-economic and political condition of these groups in India. Drop-out rates among the tribal children from formal school education has ranged from 48.2% to 62.4% in Class I-VIII and Class I-X standard respectively. 45.3% of the tribal population in the rural areas and 15.6% of the population residing in the urban areas fall in the below poverty line (BPL) category. (Annual Report 2016-17, Ministry of Tribal Affairs⁵). 35.65% of the total tribal population in the rural areas is landless and they derive their major part of income from manual casual labour (ibid: 31). 51% of the rural tribal population are engaged in the cultivation occupation.

In most of the states, the condition of the tribal groups is nothing better than the overall condition found among the tribal groups throughout India. In West Bengal, 7.8% of the total population constitutes the tribal population.

³ Ibid. See chapter 3, "The Tribal Problem" by Nabendu Datta-Majumdar.

⁴ Source: <https://tribal.nic.in/ST/Tribal%20Profile.pdf/>

⁵ Source: <https://tribal.nic.in/writereaddata/AnnualReport/AnnualReport2016-17.pdf/>.

Out of which, 7.8% of the tribal people reside in the rural areas and rest 1.5% of the total tribal population reside in the urban areas. Literacy rate among the ST population is 57.9%. Only 3.5% of the total ST population in India have attained education above graduation in the state. In West Bengal, the major tribal group is those of the Santhals or the Saothals who speak *saothali* dialect. 47.4% of the total ST population is formed of the santhals, 12.1% constitutes of the Oraons, 7.1% of the tribal population is formed of the Bhumijis and 6.9% is formed of the Mundas (Annual Report 2016-17). There are several other tribal groups found in the state in different pockets of rural areas, like, Asur, Ho, Gond, Hajang, Magh, Lepcha, Lohara and many others (see report: 200). Santhals are the third largest tribe in India.

With a population of approximately 4,260,842 this community is found in the states of Bihar, Orissa, West Bengal and Tripura. The Bengali, Devanagri and Olchiki scripts are used by them. They usually eat beef, pork and also sustain on meat of other birds and animals. The Santhals are divided, in almost, twelve patrilineal totemic clan, namely, Hansdak, Murmu, Kinku, Hambram, Soren, Marandi, Tudu Boske, Besra, Pauria, Charrey and Bedia, which are further divided into several sub-clans. Expansive review of literature has shown the presence of the santhals as an important historical fact in the social and political development of Bengal's economy. Much of the peasant revolts have also been fulfilled by the massive participation of the tribal groups in different regions of the state. Even during three decades of the Left rule, the tribal groups have been a major part of the land reform movement. Operation Barga in 1977-78 and most other land movements have seen excessive participation of the tribal groups as landless labourers in the successful execution of these uprisings.

An extensive review of literature is evident of the extreme poverty and miserable living condition of the Santhals as wage labourers and agricultural labourers in the state. An exclusive account on the hardship and the extreme form denigration that a santhal has to face is located in the scholarly works of Mahashweta Devi, who has worked very closely with the tribal groups in the villages of Bengal. Her pieces on 'The Call Never Comes: Unemployment among the Tribals' (Devi 1983), brings out the miserable life story of santhals who commit

suicide due to helplessness from excessive poverty. Most of her accounts deal with the tribals living in the districts of Purulia, Midnapore, Murshidabad and other districts. Her work on the unemployment issue among the tribal people shows that educated santhals even after having names registered in the Employment Exchange record have not received any form of formal employment. There are other non-ST groups who have always been favoured over the tribal groups in favour for providing employment. A similar account, 'A Night Bus to Bengal' (Hembrom 2013) has shown the nature of sexual harassment that the tribal women have to face by the men of the local powerful and dominant castes. A night journey in search of work from their native places to distant places is filled with incidence of hatred and powerful possession of the men from the trading groups who consider sexual proprietorship of the tribal women as their right. The village economy is replete with such instances because of the lack of economic and political power of the tribal groups in such regions.

Majority of the santhals and most other tribal groups work as migrant labourers and usually do not own much land to sustain their families. Even if some of the households own small sizes of land, they engage in various forms of casual and wage labour in the distant villages for sustenance (Devi 1983; Hembrom 2013; Hill 1988; Rao 2005, 1997; Rogaly 2001). A similar condition is also evident in the two villages, Paarhati and Gangte where the fieldwork has been conducted. Even after several land reforms the economic and social condition of the tribal groups mainly the santhals who have migrated from the districts of Purulia and Bankura has not improved. They continue to work as agricultural and landless labourers and are mostly looked down upon by the upper caste villagers. The fieldwork has been conducted for a span of one year to understand the social, economic and political condition of the rural economy in the two agricultural developed villages of Memari II block of Bardhaman district.

The present paper analyses the position of the santhals in the rural economy of the two villages. Based on participant-observation and case-by-case analysis of the narratives taken from the various households belonging to the different caste and class groups, the paper is aimed at analysing the rural economy and the place of

the santhals in the complex social milieu of the two villages. The paper will focus on the cultural existence of the santhals as tribal groups in the villages, their relation to other caste groups as being part of the rural economy, their economic condition in the two villages, their aspirations and the impact of the changing regime on the issue of tribal development in the villages, the district and the state as a whole.

Santhals and the Village Culture

Shyamlal Hemran, 70 years old, is a resident of the Paschim-advasi *para* of Paarhaati village and continues working as part-time labourers, the rich history of Bengal's people and their brave stories of working for farmers during the Tebhaga movement of 1977-78 is relived. Hemran was actively involved in Tebhaga movement in 1977-78. He was one of the core team members of the then Communist Party India (Marxist) or CPI (M). He has had made an important contribution towards the development of agriculture and farmers in the state. During 1970s, like Hemram there were many other members from both tribal and non-tribal groups who had formed the backbone of the development story led by the state. Currently he owns 0.08 acres or 5 cottahs of land, which in agricultural terms, is hardly considered to be cultivable. His contribution towards such land reforms movement has never paid him off for a better living standard in his fragile years. Hemram does not receive any form of unemployment or senior-citizen pension. He has an unemployed son, a daughter-in-law and two grand-children to feed. The only source of income of the family is working as agricultural labourers in the land of the local landlords or the *munibs* or in the land of the muslim landlord also called as the *miye jamidar* in the local dialect.

During the years when he had worked as a party worker he had even visited different states like Rajasthan to pave for the introduction of hundred days of employment and also for protesting in favour of the labour rights protection in the rural areas. However, back in his own villages he has only a small piece of shared land to stay with his family. Hemram has taken a cow and two goats under the system of *poushani*. Most of the tribal people residing in the two villages engage in the system of *poushani* according to which they take

cows and goats in hire from the local landlords and keep them till give birth to a child. Feeding and looking after the well-being of the cattle stock is the complete responsibility of the tribal family. If the animal gives birth then the young calf or the kid is taken by the family. However, if there is no such possibility then the cattle remains with the family till it gives birth. Milk from the cattle and cow dung received becomes of household necessity for the family which hires the cattle. In this way, the tribal households continue the system of hiring the cattle stock from the local landlords and use it as a form of sustenance and economic livelihood. Hemram's son used to work as contractual labourer in Kolkata and daughter-in-law continues working as agricultural labourer. Their thatched hut does not even have electricity. Like Hemram there are many other families which reside in the *Purba-adviasi para* and have a similar living condition in the village.

The experiences and life-chances of the villagers do not remain same for all households. The living standards and the expectations of the tribal groups and the groups working as agricultural labourers is much different from the aspirations and profit-making motive of the village landlords or the *munibs* and the *Babus*. The life-world of the Brahmins residing in the village is again much disparate from all these groups. Though politically, they have similar wants but through different means, however, in terms of socio-economic variation there is much to speak of the various groups residing together in a Bengal village. It is interesting to note that even after several years of Left regime there is significant caste and class division found among the different groups of people residing in the village. In both the villages there is distinct segregation in terms of settlements called as 'paras' in the Bengal villages. There are ten paras in Paarhaati village, namely, Sarkar para, Brahman para, Ghosh para, Kaibartya para, Purba adviasi para, Paschim adviasi para, Hospital para, Muslim para, Baishnab para and Das para. Similarly in Gangte these are, Kumhor para, Muslim para, Adviasi para, Karmakar para, Bag para, Ghosh para, Paan para, Kapakoya para and Panapukur para. The details of the 'paras', their descendants and the nature of the households is beyond the scope of the current paper. This is similar to the field observations made by many other sociologists and anthropologists who have worked in the Bengal rural

communities (Dey 1970; Ruud 2003; Roy 2011). What is worth mentioning is the geographical location of the adviasi paras in comparison to other paras in the two villages.

In both the villages the adviasi paras are located towards the end of the villages, where the village leads to the farming fields. These adviasi paras are comparatively secluded from the rest of the households in the village. On the main road which leads to the connecting road to the main towns and connecting the cities are the houses of the upper and middle level caste group households of the local landlords, the storekeepers and the moneylenders. Knowingly or unknowingly the arrangement has become like this since its initial years of settlement. Hospital para Paarhaati village is the only settlement which has households from mixed caste and class groups of cultivators and landless labourers. Among the households surveyed in both the villages and the narratives taken from the different groups of tribal population revealed that none of the households settled in the village have any land in their ownership. Maximum land ownership among the households ranges from 0.05 to 1 acre which is hardly considered to be cultivable in economic terms. According to the information gathered from the village, there was a major population of the migrant labourers from Dumka who are no more found in the village. However, those santhals settled in the village are also not the original residents of the villages. Most of these people have their ancestral homes in the districts of Purulia, Bankura and Birbhum. These families have migrated almost 40 to 50 years ago from their ancestral home to these villages in search for better means of livelihood. Since then they have settled in the land of the local landlords in whose land they work as agricultural and landless labourers.

Culturally, they still follow their saothali culture of worshipping trees as gods or animism in technical terms, their residence is no more than thatched huts and under the big trees which surround the vast areas of the cultivated land, their settlement is almost in the outskirts of the village beyond the Dalit Muslim para and far away from the palatial building of the local landlord and the rich households of the Brahmins and the middle-level cultivators of Brahman and Ghosh para respectively. They are always found in the simplest of clothes, children

in ragged clothes and men are found in *lungi*, or the local dress for the men and in torn-off, dusty shirts. Both men and women among the santhals are engaged in the occupation of agricultural labourer. They always refer themselves to be the santhalese and in some way they are different from the rest of the Bengalis who reside in the other paras of the villages. These people speak their santhali language among themselves and speak in Bengali with the local *munibs*.

Shantimani Tudu, has migrated from her ancestral home in Purulia 40 years ago. Since then she had been working in the village as agricultural labourer. She comes along with her grandson in the field. Since 5 am in the morning during the summer and 6 am during the winter she leaves her hut to move to the fields during the harvest period. From morning till afternoon they work in the field then go to their houses for a brief lunch of rice and *chutni* or the local pickles and in some days there might be a single vegetable curry or so. The left-over rice is watered and kept for the night. This is a favourite form of food for the tribal people. This is called as *panta* in local terms and is usually being eaten with chilli. However, for men the diet is somewhat different than for the women. All the young men of the household have food together after the fieldwork and then they are provided with a local drink called as *haria*, which is formed of the palm brew and water extracted from rotten cooked rice. This, according to the tribal people, helps the men to work hard in the field. Most of the households were mainly being looked after by the women folk, the mothers and their daughter-in-laws and their daughters as well. The men of the households are usually not available because they migrate to other villages, towns and cities for better work opportunities. However, the households surveyed in the two villages did not claim of men working in the cities but many of them move to other distant villages. Being sturdy and muscular, along with the bagdis, the santhals are considered to be fit for all forms of laborious work for both men and women. Dried branches of trees are used for cooking food. Paddy, hay and feather of chicken form an important meal for the tribal people. In fact, most of the leftover parts of a chicken sold in the local market to the other upper caste members of the villages are being cooked in fire as lunch and dinner both by the tribal people. It is interesting to note that this existence of life

is something that they do not complain of. They consider their cultural being as special and different from the rest of the other caste groups in the village. As Beteille (1965, 1974), pointed out that the lower castes and the tribal groups are referred to as the '*chhotolok*' or those who are insolent. A similar view was expressed by one of the tribal woman who works as a maidservant in one of the Ghosh families. The Ghosh households are the local landlords constituting of the upper and middle class of farmers in the village. The tribal woman pointed out that still today the munibs do not accept 'us as human beings' and 'they always keep a distance from us'.

Land, Labour and Agriculture

The tribal people constitute the group of the landless and agricultural labourers or as casual manual labourers in their own village or in other villages. The class of agricultural labourers and the landless labourers refers to the rest of the rural households other the local landlords, the landowners, the middle and small and marginal farmers and the moneylenders, which do not own any size of land and usually engage in farming occupation as agricultural labourers or landless labourers. Some of the families among these households do not engage in any form of agriculture and get engaged in other non-farming occupation like painters in construction works, as construction workers, some of the households have even moved to educational occupation and there are many others who engage in informal labour work like running a van or driving the 'trekker'. There are some who have businesses set up in Memari I block which has a comparatively growing urban population than the Memari II block which is completely rural in nature. Majority of the population constitute the households with less than 3 acres of land which belong to the category of the landless farmers. *Bagdi para*, *Kaibartya para*, *Vaishnab para* (with the surname of *Bairagya*), *Bhattacharjee para*, and almost every household belonging to the adivasis fall in this category of farmers or landless labourers. However, not all of this population work as agricultural labourers. In other words, not all of the landless rural households engage in farming occupation as agricultural labourers. Among the Muslim households too, there are large number of households, which do not own any form of land. It is mostly the Muslims and the adivasis who engage in

farming occupation as agricultural labourers. Few households from the vaishnab groups and few from the *Kaibartya para* work in others land as labourers. The households in the Bhattacharjee or the Brahmin para consider that working in other non-farm occupation outside the village is much more respectable and also profitable than working in others land in one's own

village. The adivasis and the muslim households do not share any perception like this.

The area of land distributed as vested land to the ST and the SC groups does not give a very hopeful picture in terms of increasing viability for agricultural occupation for the landless and the small and marginal farmers.

Table 1: Area of Vested Land Distributed and Number of Beneficiaries in Bardhaman district

Up to	Land Distributed (in hectares)	No. of Beneficiaries (SC, ST and Others given as % of Total)			
		SC	ST	Others	Total
30-11-2007	25000	42.3	20.1	37.6	215189
30-11-2008	25157	42.2	20.04	37.6	216214
30-11-2009	25176	42.1	20.2	37.6	216850
30-11-2010	25297	42.3	19.9	37.6	220339
30-11-2011	25361	42.4	19.8	27.7	222884

Source: Primary Census Abstract, District Census Handbook 2011: 20

It is evident from the record given in the Table that the percentage of the STs having received the vested land is much less than the SCs and the Others group. According to the Census of 2011, total ST population in the district was approximately 5,296,953. Thus it counts to even less than 1% of the total ST population to whom the vested land has been distributed. However, the distribution of vested land is not again a marker of the fact that it has helped most of the tribal population living in debt will get a possible source of income. This is because, increasing price of fertilisers, machines and use of labour and technology has always made the tribal labourers fall prey to the hands of the local landlords and the moneylenders. Moreover, much of the land which is distributed is not of much use for agricultural purpose (Mohanty 2001).

In Memari II block, where the field work was conducted, is formed of complete rural population. According to the Census 2011, total ST population in the block is 27,676 persons, out of which 13,179 persons are illiterate and among the Total workers in ST group of 15,607 persons, 10,222 persons fall in the Industrial category of main workers only 412 persons are cultivators and a majority of 9,167 persons work as agricultural labourers. Number of persons engaged in the Industrial category of marginal workers number to 5,385, where again a majority of the population 5,092 persons are engaged as agricultural labourers. Among the total population a large part is left completely outside the purview of any working condition. 12,069 persons fall in the category of the Non-workers. Thus more than 51% of the total ST population is engaged in the occupation of agricultural labourer.

Table 2: Scheduled Tribe Population in Memari II Block of Bardhaman district

Category	Total	Cultivators	Agricultural Labourers	Household / Industry Workers	Other Workers
Industrial Category of Main workers	10,222	412	9,167	29	614
Industrial Category of Marginal worker	5,385	86	5,092	10	197
Non-workers	12,069	-	-	-	-
Total ST population	27,676				

Source: District Census Handbook, 2011: 230-233.

The district record of the economic portfolio of the ST population is in consistent with their operational holding status in the state as well as in the district-level. In other words, it can be said that a major portion of the ST population is engaged in the category of agricultural labourers because a majority of this population is devoid

of any operational holding which can be used for the purpose of cultivation. It has been mentioned before as well that number of ST families to whom the vested land has been distributed forms less than 1% of the total ST population in Bardhaman district.

Table 3: Operational Holding of ST population in State and District levels

West Bengal		Bardhaman
Size of Holding (in ha.)	Total holdings (as% of All Classes)	Total Holdings (as% of All Classes)
Below 0.5	58.5	73.3
0.5-1.0	25.4	19.6
1.0-2.0	12.88	6.59
2.0-3.0	2.75	0.49
3.0-4.0	0.29	0.04
4.0-5.0	0.08	0.02
5.0-7.5	0.05	0
7.5-10.0	0	0
10.0-20.0	0	0
20.0 and above	0	0
ALL CLASSES	582271	24730

Source: Agricultural Census 2010-2011, <http://agcensus.dacnet.nic.in/DL/districtT1table1.aspx/>

<http://agcensus.dacnet.nic.in/SL/StateT1table1.aspx/>

From the Table, the picture of operational holding of the ST population becomes clear. This is not much different from the observation made during the fieldwork in the villages. Unfortunately, there is no consolidated data on

the land holding of the ST families at the village level. However, through the information gathered from the different sources and the Block Development Officer (BDO), it got clear that out of the 70 households in both

paras of Paarhaati village and 40 households of Gangte, only 6 households have 0.16 acres of land, 8 households have 0.08 acres of land, 3 households have 0.33 acres of land, rest of the households are landless and engage in season work as agricultural work or work as manual labourers in other non-farm activities. From working as agricultural labourers they earn rupees 130-150 and 2 kgs of rice. Compared to the profit accrued by the local landlords, the medium and small and marginal farmers, the amount paid as the labour wages is very meagre for the tribal groups.

Given this miserable condition in terms of land availability and provision of agricultural land to the tribal people, many labourers like Shyamlal Hemram, Shantimani Tudu and many others like Lakshmi Mandi, completely depend on survival through different forms of available work in the villages. One afternoon when I had visited the tribal settlement I was stopped by the sight that most of these families dwell in the left over liver and other internal parts of chicken which are usually not sold in the market. These left-over parts were being baked in fire and along with these the wings of the chicken which is usually thrown away as waste was being cleaned and readied to be cooked in the form of curry. It was a difficult sight to perceive the living condition of the tribal people. However, for them this has become a usual and a very common form of existence. When they were asked of the nature of development they would like to the government to bring in the village, there was hardly any response. Gora Tudu, who was also a party worker like Shyamlal Hemram and is still in touch with the panchayat-level administration, emphasised that none of the regime have done something good for them. The overall condition is itself miserable for most of the agricultural labourers from both the tribal and the scheduled caste groups. The situation is worse for the tribal people. The panchayat does not look into the issue of infrastructural development of the villages, there is one anganwadi centre for the tribal children and one public tap for use by the households of the adivasi and the muslim para. Most of the houses are devoid of electricity even. No developmental initiative has been taken in the village to help in improving the working and living condition of the tribal people in the two villages.

Conclusion

The condition of agriculture has not improved in the backward villages of rural Bengal. The tribal population who are mostly migrating from one village to the others and have shifted to such areas which are comparatively better in agricultural infrastructure do not get any favourable condition. Even after a change in the regime the condition at the grass-root condition has not significantly changed. The caste, class and power politics between the different faction of landlords and moneylenders, which is beyond the scope of the discussion in this paper, has made the situation even worse. While visiting the villages and interacting with the tribal labourers and being a participant observation of their life and living condition, it was only clear that this is a form of hardship which they have accepted as the only form of venting out from dying in poverty.

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Waste Collection and Transportation Using GIS Modelling

Dr. Prem Chandra Pandey

Challenges

Waste management issues are coming to the forefront of the global environmental agenda at an increasing frequency, as population and consumption growth result in increasing quantities of waste. These end-of-pipe challenges are coupled with the extending knowledge and understanding that the Earth's natural resources are limited by nature and their current exploitation rate unsustainable. In the context of the limited resources challenge a New Paradigm for waste management has emerged, shifting attention to resource recovery, resource efficiency and minimization of environmental impacts throughout waste management cycle, from waste minimisation, prevention to safe disposal using GIS, for economic benefit at consumer and managerial levels.

Response

The Geographic Information System is a newly emerged technology which has contributed a lot in very less time span to the waste management society. It helps to manipulate and analyze data in the computer to simulate alternatives and to take the most effective decisions. There are several problems which need to be solved and the decisions should be taken considering all the related factors. Often the order and the amount of preferences given to these factors, decides the decision's credibility. GIS has a great advantage over manual methods as it saves time and also there are fewer possibilities of confusion and errors as the work is carried in layers and the system is capable to coordinate between spatial and non-spatial data. GIS allows us to create and store as many layers of data or maps as we want and provides various possibilities to integrate tremendous amounts of data and map overlays into a single output to aid in decision making.

Action Taken

The most widespread application of GIS supported

modelling on waste management lies in the areas of landfill siting and optimisation of waste collection and transport, which are discussed in detail in the following section. Additionally, GIS technology has been successfully used for siting of recycling drop-off centres, optimising waste management in coastal areas, estimating of solid waste generation using local demographic and socioeconomic data and waste generation forecasting at the local level. Nowadays, integrated GIS technology has been recognised as one of the most promising approaches to automate the process of waste planning and management.

Learning

The findings have shown the most widespread application of GIS supported modelling on waste management offer in the areas of landfill siting and optimisation of waste collection and transportation. Furthermore, GIS technology has been successfully used for siting of recycling drop-off centres, optimising waste management, estimating of solid waste generation using local demographic and socioeconomic data, and waste generation forecasting at the local level to regional level. This caselet will help to understand the introductory part of GIS modelling for the optimisation of waste collection and transportation.

The optimisation of the routing system for collection and transport of municipal solid waste is a crucial factor of an environmentally friendly and cost effective solid waste management system. The development of optimal routing scenarios is a very complex task, based on various selection criteria, most of which are spatial in nature. The problem of vehicle routing is a common one: each vehicle must travel in the study area and visit all the waste bins, in a way that minimises the total travel cost: most often defined on the basis of distance or time but also fuel consumption and considering signals, CO₂ emissions etc. This is very similar to the classic Travelling Salesman Problem (TSP) (Dantzig et al., 1954). However, the problem of optimising routing of solid waste

collection networks is an asymmetric TSP (ATSP) due to road network restrictions; therefore, adaptations to the classic TSP algorithm are required, making the problem more complex.

In this context, GIS methods have been utilized for route optimization (for waste collections in urban and rural environments separately) and transport minimisation

through improved siting of transfer stations, landfills and treatment installations or processing centres for integrated regional waste management. This is offered by GIS as spatial modelling which enable managers to significantly save money and environment through the reduction of travel time, distance, fuel consumption and pollutants emissions during waste collection and transportation (WC&T).

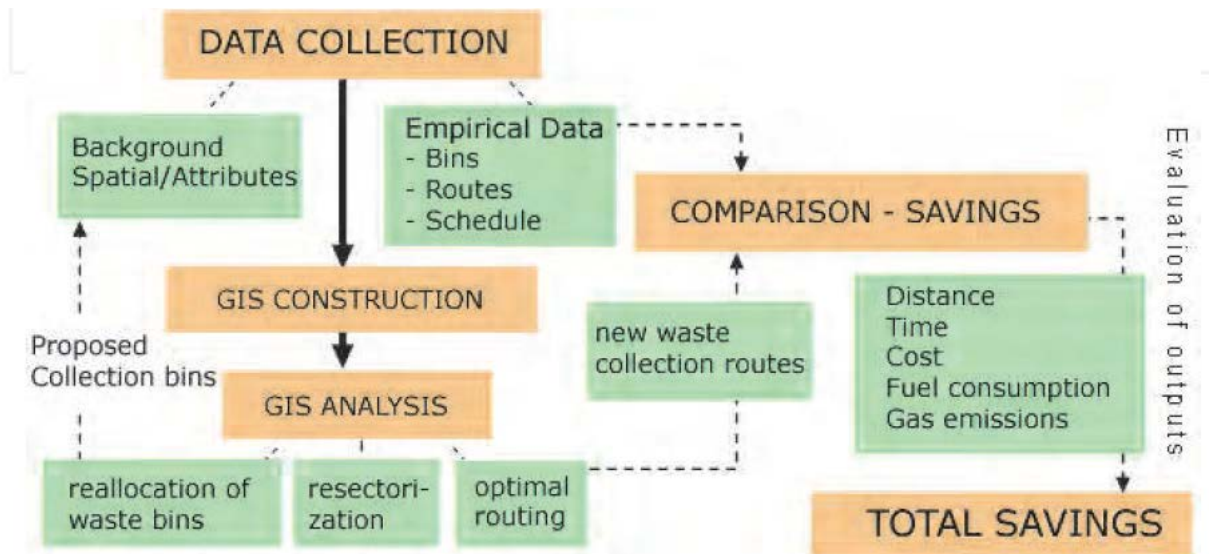


Figure 2. GIS modelling for waste management with cost efficiency

Course Positioning

The caselet is suitable for a course in Waste Management and Social Entrepreneurship. As the caselet reveals how GIS technology is helping policy makers and planners in cost effective waste collection and

transportation using spatial information guided with GPS. It will be helpful in introducing topics like waste management using GIS, practical approach and in field knowledge for waste management course.

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Remote Sensing and GIS for Waste Management Site Suitability

Dr. Prem Chandra Pandey

Challenges

With rapid increase in urbanization and population growth massive tons of waste is generated daily. These unmanaged wastes from different municipalities have been creating a serious threat to environment and human health. Solid waste dumping is a serious problem in the urban areas because most solid wastes are not dumped in the suitable areas. Bhagalpur city Bihar has the problem of solid waste dumping site identification. The main objective of this study was to select potential areas for suitable solid waste dumping sites for Bhagalpur city Bihar, which are environmentally suitable. There has to be an appropriate planning for proper waste management by means of analyzing the waste situation of the area.

Response

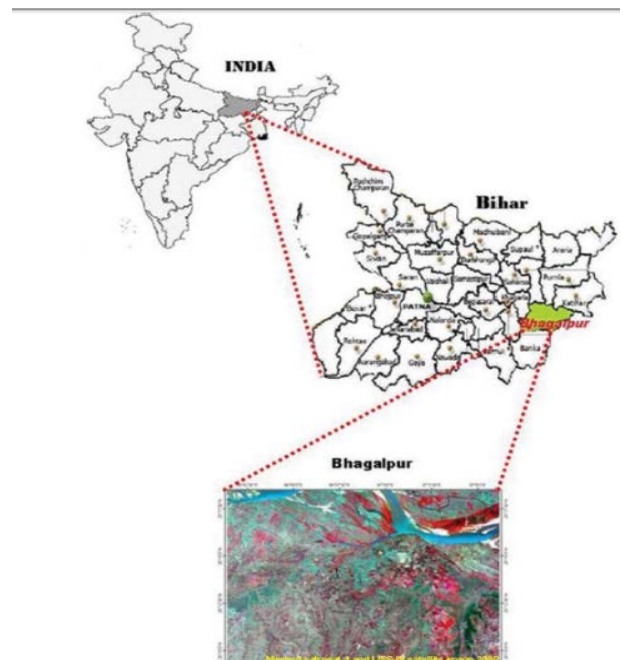
The Geographic Information System is newly emerged technologies which have contributed a lot in very less time span to the waste management society. It helps to manipulate and analyze data in the computer to simulate alternatives and to take the most effective decisions. There are several problems which need to be solved and the decisions should be taken considering all the related factors. Often the order and the amount of preferences given to these factors, decides the decision's credibility. GIS has a great advantage over manual methods as it saves time and also there are fewer possibilities of confusion and errors as the work is carried in layers and the system is capable to coordinate between spatial and non-spatial data. GIS allows us to create and store as many layers of data or maps as we want and provides various possibilities to integrate tremendous amounts of data and map overlays into a single output to aid in decision making (Pandey et al 2012).

Actions Taken

In a recent case study conducted by Pandey et al

(2012) their paper "Geospatial strategy for sustainable management of municipal solid waste for growing urban environment" for Bhagalpur city with an estimated area coverage of 434.40 km². Both primary and secondary data were employed in the study. The primary data were collected from field surveys and observation. Whereas, the secondary data for the study were acquired from reports, internet, books, journals etc. LISS IV and CARTOSAT satellite data with 5.8 m spatial resolution and 2.5 m respectively, master plan and topographic map of the town were used for this study. The municipal boundary as well as the information regarding the collection of the solid waste was procured from 21 different sites. The GPS and ground truth data collected from the sites were used to validate land use land cover classification.

Figure 1: Study site in Bhagalpur City Bihar



Various types of suitability analysis is done for solid waste dumping site such as

- Distance from waterbodies (include river and lake jointly or may be taken separately)
- Suitability of land use/land cover
- Suitable distance from main roads to solid waste dumping site
- Suitable distance from protected areas
- Suitability of slope (no score for flat region)
- Suitability of settlement.

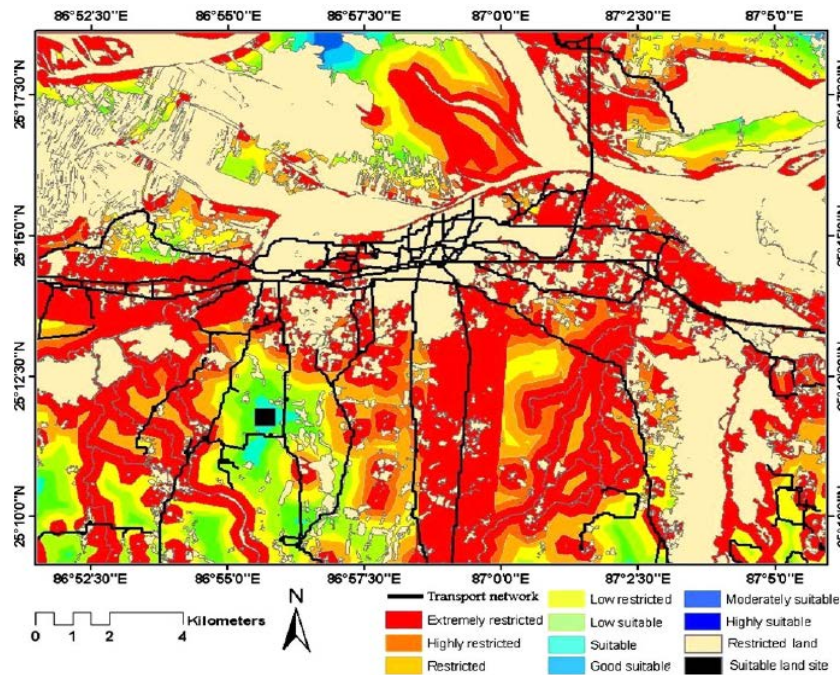
Table 1: Criteria to locate suitable site for waste disposal

No.	Criteria	Sub-criteria	Buffer zone
1	Technical criteria	Road	~500m
		Rail	~500m
		Slope	~0-12%
2	Environmental Constraint	Surface water	~300 m
		Sandy area	~Restricted
		Waterlogged area	~Restricted
		Protected forest	~Restricted
		Cropland	~Restricted
3	Social	Land use- Land cover pattern	Future use of urban dynamics changes
		Population & distance from urban agglomeration	-Away
		Settlement (urban)	-6 km (in two rings) varies
4	Political Constraint	Administrative boundary	Within reach

Reclassified images are prepared after analyzing all these factors and weightage is assigned to every classes. The final map (Figure below) has 11 colors (classes). The most suitable area for solid waste

dumping site is marked by dark black color shade. The highly suitable site gave the area of 1.5 km² which makes only 0.30% of the total area. Out of 1.5 km², 0.31 km² was suitable according to all criteria being used and taking the range of study area.

Figure 2. Final suitability map



Learning

The findings have shown the ability of GIS and remote sensing as a veritable tool for analyzing the criteria for decision support. The analysis has taken land use, slope, water sources, settlement and transport facilities as determining factor in order to find appropriate site for solid waste dumping site. The results have shown that four sites were selected as the most suitable. The sites are easy to access; manage for disposal of solid wastes. These places are far away from any water sources and other variables put into analysis. They are located in southern and south east of the town and are dry agricultural areas, bare land and grass land with 0-10% slope. Hence, the capacity to use GIS and

remote sensing technology for the effective identification of suitable solid waste dumping site will minimize the environmental risk and human health problems.

Course Positioning

The caselet is suitable for a course in Waste Management and Social Entrepreneurship. As the caselet reveals how GIS is better than traditional site selection keeping in mind environment, ground water, population density as well as transportation facilities. It will be helpful in introducing topics like waste management using GIS and Remote Sensing, practical approach and in field knowledge for waste management course.

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A Swastika Model for Rural Design Schooling (SMRDS)

Impact Assessment of Kala Raksha Vidhyalaya in Kutch, Gujarat

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Introduction

The word **handicraft** includes a varied range of pieces. The Office of the Development Commissioner (Handicrafts) gave a workable meaning in the Eighth Plan: "Items made by hand, often with the use of simple tools, and generally artistic and/or traditional in nature. They include objects of utility and objects of decoration". Basically, handicrafts are categorized into two class: a) Objects of everyday usage and b) Ornamental objects (Shah and Patel, 2017).

One of the exceptional characteristics of India is the determination of a wide range of different consistent rural cultures. These cultures can be rapidly marked by material culture: clothing and traditional arts and crafts. The exceptional characteristic, nevertheless, more than the clothing and crafts themselves is the circumstance that such expressions come from a collective understanding of the world, a common identity, and an atmosphere in which art is joined into day-to-day life. Additionally, the arts are the creation of traditional learning schemes, which diverge from those of official learning with which people are familiar. With faster development and globalization, such rural lifestyles are nowadays threatened. Yet, it can be gained from them whereas they are still integral (Frater, 2012).

The Handicrafts Part plays an important part in the economy of India. It offers employ to an immense sector of artisans and produces considerable foreign exchange for the nation, whereas conserving its cultural inheritance. Additional, most commercialized craft points for fast, standardized and small cost replication. This reproduces the factory model. The forte of hand craft, creative idea involved and handmade quality are elapsd. The net outcome is that even when artisans can get a living by making contemporary types, most do not wish their children to be artisans (Kala Raksha, Kutch). Assuredly, some method must be changed to allow the artisan to be socially and economically powerful so that

they can withstand and spread the Indian cultural inheritance from generation to generations forever (Shah and Patel, 2017).

Jadhav (2013) indicated that the Indian handicraft business is an unorganized, decentralized, work exhaustive cottage business. Some of the fortes recognized are availability of plentiful and inexpensive work in the nation, utilization of local resources, small capital asset and sole craftsmanship in the elaborating of products along with rising appreciation by transnational customers. Notwithstanding the fortes, the business confronts a amount of difficulties in the nation such as small literateness and education levels, absence of contemporary/ technological skills and absence of suitable finance. The development commission recognizes the fact that the unorganized area that establishes around 93% of the workforce doesn't have an organized scheme to support obtaining or upgrading of skills. The 12th Five Year Plan's idea for the handicraft area comprises formation of worldwide competitive handicrafts and delivery of sustainable living chances to the artisans through pioneering product concepts, better merchandise quality and utilization of technology whereas conserving traditional art.

India has a great history and inheritance of arts and crafts; the traditional Indian community economy has been self-supporting and self-providing for decades. Artisans are the support of India's non-farm rural economy, the distinguished facet about these rural artisans is that they belong from the disorderly sector. As per the outcome of work power survey on employment and unemployment directed in 2011-12 by National Sample Survey Office (NSSO), the amount of assessed employed person were 47.41 crore of which 82.7% of staff (39.14 crore) was in unorganized area (Banik, 2017). Jadhav (2013) concluded that notwithstanding efforts being occupied, matters such as absence of application of strategies and attentiveness on the macro standpoint have finished the efficiency of the efforts, offering tiny or

no outcomes. Post the evaluation of the present state of the Indian artisans, there ascends a necessity for enhancing the skills of this workforce. The current national strategies also sustenance this thought. This workforce that forms a foremost portion of the unorganized area has great employ potential that needs to be appointed.

Yadav (2012) indicated that the difficulties of rural art, that is, the rural artisans like ceramists, weavers, carpenters, blacksmiths, shoemakers, and so on., are fronting numerous complications and difficulties nowadays. The significance of their artwork is declining in their respective communities and contiguous villages. The excellence of their production is falling and they have to deal with excessive competition with the engineering sophisticated goods. Main factors which are accountable to their failure in this respect can be: illiteracy of artisans: Frequently rural artisans are still illiterate or uneducated; some of them are not educated up to the matric grade. Their illiteracy also plays a vital influence which disposed of their family jobs. Because they are not alert of the many strategies and policies of marketing and many artisans programs organized by the state and center administration. Other problems are: non-availability of raw material; income level of rural artisans; use of old and obsolete machinery and equipment; lack of financial assistance; seasonal demand of their products; no means of transportation and communication and shift of rural customers towards the industrial products.

Application by developing countries of technical assistance plans (e.g., design training) to enhance artisans' skills and inspiration grades is not new. Seemingly, such plans were failed at introducing an unconventional design domain to motivate artisans to develop progressive thoughts (Suzuki 2005). Differences in the nature of artistic perception, which effect artisans' design thinking procedures, may have helped to program disaster. A conventional mindset was obvious from gaps related with in-depth cognitive grades of artisans and designers during the initial phases of notion generation (Nagai, Junaidy and Ihsan. 2012).

Frater (2019) indicated that the idea of the design education program is to assess traditional craft as

cultural inheritance, to take traditional information as a pre-requisite and offer what is understood as advanced or specialized education directly to artisans. The aim is to allow artisans to rise their capacity by using their strength—creativity—as well as work. Concurrently, by bringing artisans in contact with modern markets and training them to modernize within traditions, they are also sustained. The intent is that through education artisans get respect as well as revenue. Underlying this idea is the confidence that money-profit, scaling up, etc., is not the final aim.

KalaRaksha

Kala Raksha Vidhyalaya is a public communal enterprise, originated on handicrafts worker's initiative in 1993 in Kutch, Gujarat, India. KalaRaksha presently works with a thousand artisans from fifteen townships to create some of the most attractive hand-embroidered and patch-worked textile goods, Kala Raksha Vidhyalaya, a Design School for Traditional Artisans, is a project assumed by Kala Raksha Trust to encourage education of traditional artisans. The Vidhyalaya is a long-term answer to guarantee sustainability of craft as livelihood. It attempts to empower artisans from around the area of Kutch, which is disposed to the drought, earthquake and hurricane.

Objectives

The paper deals with the overall socio-economic impact of Kala Raksha Vidhyalaya (KRV) on the professional life of Kutch Artisans who graduated from KRV. The idea is to understand the socio-economic impact of a design school in a rural area that focuses on preserving, promoting and sustaining traditional arts and crafts of a community or geography and, at the same time presenting the practice as a source of stable and healthy livelihood opportunity. Hence the objective of the paper is *to assess the impact of Kala Raksha Vidhyalaya on the overall development of artisans who graduated from the rural design school. Moreover, the paper also attempts to provide an implementable model for rural design schooling.*

Research Methodology

The study involved both quantitative and qualitative studies for primary research. A structured questionnaire interview schedule was designed, where 56 respondents (artisan graduates) participated for assessing the impact of KRV on the artisans and their livelihood. Convenience sampling was used for collecting the data due to remoteness and availability of each respondent. A semi

structured interview schedule was designed for understanding the functioning of various aspects of KRV and the challenges it faced over the period of its existence. The veteran artisans, director and employees along with veteran development workers were interviewed for the same.

The newspaper articles, memoirs and, research papers were used for collecting data for secondary research.

Data Analysis

Age Group	No. of Participants (N)
18 and below	6
18-24	12
24-30	8
30-40	10
40-50	10
50 and above	10
Gender	
Male	27
Female	29

Table 1: Demographics of respondents

The research conducted witnessed an equal number of respondents from both the gender. While, there were more participation from age group 18-24 (12) and 30 and above (30 combined). With a sample of 56, the numbers signified the diversity of participants that KRV catered in Kutch.

Employment Status		
Type of Employment	N (Pre KRV)	N (Post KRV)
Employed	22	26
Self Employed	16	30
Not Employed	18	0
Priority of Work		
Primary (Full Time)	30	45
Secondary (Part Time)	8	11

Table 2: Employment status post and pre KRV

It was surprising to see that there were 18 unemployed artisans who become employed post graduation from KRV. Moreover, there was an increase in taking arts and crafts as a primary work post KRV graduation among artisans.

Percent Change in Income from Arts and Crafts		
Percent of Income from Arts and Crafts	N (Pre KRV)	N (Post KRV)
20 and below	11	7
20-40	3	1
40-60	3	6
60-80	5	3
80-100	18	23
Perceptual Income Comparison with Other Artisans		
Change (Decreased)	12	3
Change (Increased)	6	42
No Change	38	11

Table 3: Income and associated comparisons

It was observed that the artisan graduates were happy with the income status post graduation. Nearly, 45 respondents witnessed an increase in the total income while 3 found that their income decreased. The reason was they were recent graduates and had their own startups where they made an investment.

Output (Learning and Skills)	
Factors	Average Rating (out of 5)
Integrity	4.04
Understanding	3.93
Teamwork	4.10
Trust	4.19
Crisis Management	3.69
Solidarity	3.68
Understanding	3.84
Networking	3.58
Reputation	4.02
Competitiveness	3.80

Table 4: Learning during the design programme at KRV

It was observed that all the 56 respondents experienced a great set of learning post graduation from KRV. They highly rated learning and skills like integrity, teamwork, trust building and reputation made in the sector. While, other factors measured above average signifying KRV as an agent of wholesome development of these artisans.

Perception of KRV Graduation with Respect to Design Education	
Statements and Affirmations	Average (out of
I feel more literate about my work as compared to other artisans (non KRV)	4.58
I am confident in imparting knowledge to other fellow artisans	4.62
I carry myself as a respectable artisans in a society	4.25
I am more aware of my indigenous occupation	3.98
I would like to send my children/ relatives to KRV	4.39
I exhibit my work more often in various forums	3.60
I have better understanding of colours after graduating from KRV	4.44
I am capable of dealing with themes of various kinds	4.60
I am more innovative with my designs	4.32
I am more aware of contemporary market and channels	3.93
I am more aware of channels of distribution	3.57
I am more aware of customers preferences	4.05
I can present my product in a better way	4.04
I have learnt to merchandise my handicraft more effectively	3.89

Table 5: Perception of KRV Graduation with Respect to Design Education

The 56 graduates surveyed highly rated literacy of the handicrafts, knowledge transfer, market orientation and product presentation while at the same time preferred sending their kids and relatives engaged in handicrafts to KRV. Moreover, other factors like orientation of various employment opportunities, knowledge creation etc. received an above average rating.

Findings

The study concluded that all the artisans who are either self-employed or employed by an employer in the handicrafts have attained the required design and management (market) knowledge after graduating from KRV. They see themselves as a respectable artisan in the society and can built their own designs and work on various kinds of themes.

The integrity, trust, understanding amongst their co-workers have sky rocketed due to KRV's sessions which puzzled out understanding colours, identifying and researching market trends, analyzing customers, communication, presentation, and more.

The artisans (majorly men) have also understood about the markets and have to knowledge of target audience and to which segment of the market they are catering with their crafts. However, majority of women artisans on one side benefitted from the course with knowledge

and employment but on the other side, could not independently (self-employment) march towards market with their brands and initiatives.

Conclusion

KRV has definitely made an original contribution to the understanding of the relational role of design, market and management practice as part of practicing traditional arts and crafts. The indigenous concept of rural design schooling supports the bigger sphere of rural community development of villages of Kutch. Though the focus has been on preserving the traditional arts and crafts, KRV conveniently crafts a path for artisans of Kutch to enter the business space and pursue their art as a fulltime profession. KRV's effort has made other organization and even the government to introduce art-led initiatives as a commonplace in rural development strategies. The effects of design education in rural community, particularly beyond economic development, have received attention in social and technical space in

Kutch. However, there is a need to introduce a more sustainable model for sustaining a fund driven model of KRV. A Swastika based model for providing a sustainable structure to such rural design schooling has been presented as a suggestion in the recommendation section.

Recommendations

A rural design school will face multiple complexities

when operating in a complex rural setting. Hence, it is important to consider certain factors that can help them establish a robust model of rural design schooling. Swastika Model of Rural Design Schooling (SMRDS) is an attempt to present one such model that tackles the rural dynamics with respect to education oriented arts and crafts focused interventions. The model has emerged from observation that were made during the stay at KRV where we focused on understanding the functioning and associated failures and problems of the school.

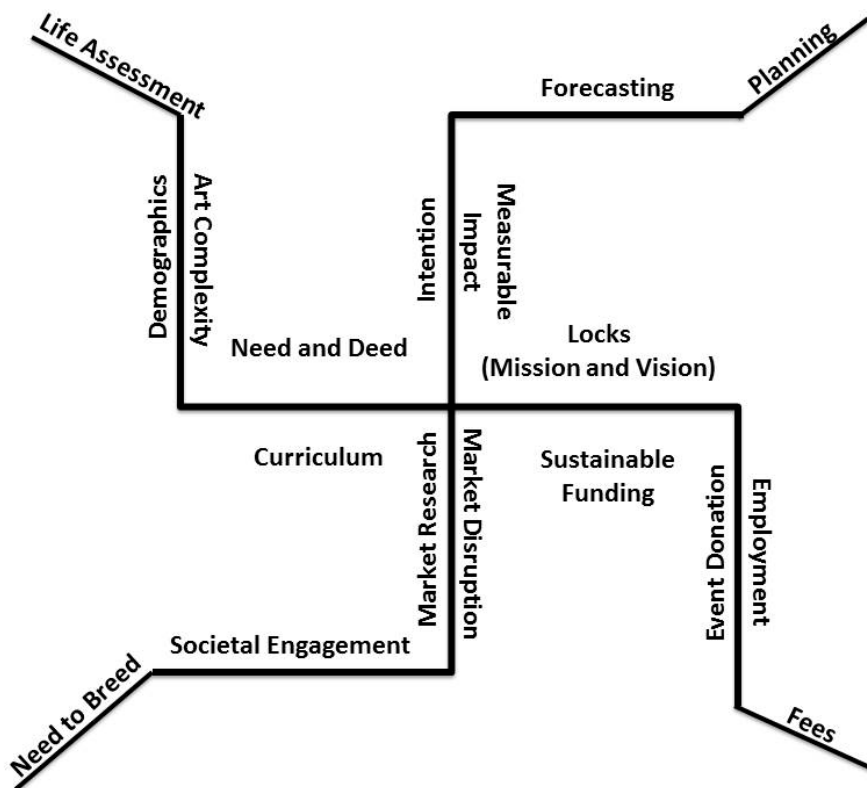


Figure 1: Swastika Model of Rural Design Schooling (SMRDS)

The Swastika based model depicts four important quadrant of establishing a rural design school. The first quadrant talks about **Need and Deed**. The focus is one understanding the why such model is needed in the community and what activities facilities such activities. It further stems to **Demographics** (the ability to understand various characteristics of the group), **Art Complexity** (the ability to comprehend diversity of arts and crafts and striking a union between them), **Life Assessment** (understanding the importance of the

respect art in the community) and **Intention** (introspecting own organization to find out why we want to do it).

The second quadrant is **Locks (Mission and Vision)** which signifies the way impact of the schooling is perceived and

how it is measured and monitored on regular basis. It further stems into Measurable Impact (the ability to define measures of impact intended), Forecasting (the

ability to understand the future of the respective arts and crafts sector) and Planning (the ability to create long term and short term plans, which stems from forecast).

The third quadrant focuses on the **Curriculum and Infrastructure** which is the most important part of the whole model. The focus here is on designing a curriculum that is market driven and serves to the needs of the society. Moreover, the infrastructure has to be accessible and state of art, enlisting all the facilities to promote a learning and conducive environment. It further stems into Market Research (the ability to understand the market and incorporate all the relevant courses. It also focuses the ability to understand the dynamics of the respective arts and crafts sector and incorporate the same), Societal Engagement (the ability to understand the societal dynamics of the artisans and ensuring that the curriculum resorts to these dynamics for better acceptance) and **Need to Breed** (the ability to market this curriculum as a need to artisans and their community and make it as inclusive as possible).

The fourth quadrant is **Sustainable Funding** which is the backbone of the whole project. The focus here is to establish a robust funding model which partly relies on donors and partly on the revenue potency of the school. It further stems into Market Disruption (the ability to interpret the market for the arts and crafts and accordingly framing a proposition to big players to invest in the school), Event Donation (the ability to organize events with famous design schools where you can approach prospective patrons), Employment (the ability to convince various designers to employ these artisans after graduation and earning a small percent of it) and the last resort is to establish a minimal fees for the artisans who wishes to study.

The model revolves around the core philosophy of ideating to establishing a rural design school in any part of the India and the world accounting for all the dynamics. However, a detailed study needs to be conducted to understand the impact and functioning of the model.

Limitations

- The research incorporated convenience sampling to survey artisan graduates due to time and resource constraints.
- The responses received were the best outcome of the respondents keeping in mind his/her limited proficiency.
- The study couldn't capture a comparative analysis of graduate artisans with non-graduate artisans. The comparative study can serve as the future scope of research on KRV.
- The SMRDS model proposed in the paper is a simulation done with KRV and can be incorporated to establish similar schools. However, the model needs to go through a rigorous set of experimentation which serves as the current limitation of the same.

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Living on the Frontiers of Ladakh

An Exploratory study of Ayee Village in Ladakh, Jammu and Kashmir

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Abstract

Ladakh has always been a strategic location for India. It shares borders with two distinct political neighbors Pakistan and China. Moreover, it is a prominent location for tourism and Bollywood movies. However, much concern is given to the advancements of India's army base in Ladakh, a very little attention is induced to other development prospects especially with respect to rural development (Bray, 1988). It becomes increasingly important to understand the functioning of a village and associated challenges in day to day rural life of Ladakh. The paper attempts to explore various facets of a Ladakhi village. The focus here is to present an exploratory study of the Ayee village which is situated in Nubra Valley, Ladakh. The paper incorporates an ethnographic cum survey based approach where the research comes out as a result of two months stay in the Ayee Village.

Introduction

Ayee village is one of the Buddhist villages of Nubra Valley. It is situated 70 Kms from Diskit, the headquarter and 5 Kms from Kobed, the village panchayat. Woven with a population of 181 Ayee-ites, the village holds 37 households with a demographic age of 37.22 years. The formation of the village holds primitive foundations with a blurred history. The village marked its existence with four families who came to a small land in search of food and shelter. The village dynamics highlights all the households related to these four families.

The rural dynamics revolve around subsistence agriculture as a primary occupation. The village has witnessed zero net migration in the past ten decades with seasonal economic migration as a trend. Ayee-ites engage in organic agricultural practices from April to July while peaks MGNREGA work in the first quarter of every year. The land sees rest in winters from August to February. A cascading effect is observed when problems are addressed in the village. Dwindling literacy and high school dropout rate also predicts the economic instability of the village. The village entails a sharing economy with non-economic give and takes phenomenon.

Untapped as a tourist destination, Ayee withholds an ancient meditation cave and famous Juniper tree and

related stories. Moreover, use of traditional agricultural practices and organic farming makes Ayee stand as the fully organic village of Nubra Valley. As a village in a remote area of Nubra Valley, it has suffered from opportunity crisis.

Research Methodology

For the research I incorporated various research tools and methodology at various stages of research. The same is discussed below:

In order to understand all the dynamics of the village, both qualitative and quantitative research was used for the study. The data regarding the

Sampling: For the study we did the census of the village. All the 37 households were considered for the research. The data is the census of the village. The data talking about demographics, education, and livelihood pattern and skill base is the result of Census Data.

Secondary Data

Since there were no reports available in relation to the village Ayee officially or unpublished, the team had to refer to the only report available which was Micro Level Plan 2010 by Tata Institute of Social Science. Moreover, journals like Stawa and news articles of The Ladakh Daily

were frequently referred to understand the functioning of villages of Nubra Valley in general. In addition to that, we referred to various internationally published papers

to understand various phenomenon and behaviour of rural India.

Background

Demography

Age Group						
0 to 5	6 to 12	13 to 17	18 to 30	31 to 45	45 to 60	60+
10	18	11	55	31	40	14

Table 6: Age wise distribution of the village

The village holds unique demographics. Its 181 residents can be precisely halved under the head male and female. Ayee’s average age is 37.22 years, with a staggering fifty-five people between the age of eighteen and thirty. Everyone here is a Buddhist by religion. The average size of a family is 4.8 persons per household. Moreover 45% of the population slice up age group below 30 years. This induces the idea of economic development among youngsters.

Sex Ratio

Sex Ratio assumes a solid job in the best possible working of the general public. A village rich with characteristic assets or rehearsing agribusiness as an essential action pursues the idea of ecofeminism. Ayee has seen a pixel flawless sex proportion of 1:1. The village with 182 occupants has 91 guys and 91 females. Additionally, the sexual orientation divergence in the family and horticultural exercises pursue a thin line of contrast. People similarly partake in day by day errands of life. Also, Agriculture has assumed a vital job in obscuring the sexual ratio. In any case, a male individual from the family is generally the provider of the family as farming is drilled mostly for subsistence than for exchange.

Street-Wise Facilities Village Institutions

Ling Road is the only street in the village. All the houses are situated in this street. This 3 has 37000 work equipped private dry toilets but no domestic water supply. There are 9 public taps that provides water from canal flowing from the Glacier which provides drinking and domestic water supply to all the houses. Moreover all the houses and television set. While the LPG connections are available to the villagers, all the households have traditional Bukhari (wood powered furnace) on which they cook their daily meals. The reason for the low consumption of LPG is not the awareness but the heat generated from this furnace that keeps the room warm during winters. Moreover, the street displays two non-functional public toilets which are on the outskirts of the village. Electricity has taken a huge toll on the productivity of the village as households on an average receive electricity for 5 hours from 6:00 PM to 11:00 PM in the evening. The time is utilized in charging mobile phones and watching local Ladakhi news which turns out as the mode of entertainment for the villagers. There were two street lights witnessed on the outskirts of the village near the community hall which also functions for five hours. Overall, the village street has limited resource availability which is publically shared by all the households of the village.

Streetwise facility	
Particulars	Numbers
Households	37
Brick houses	37
Public toilets	2
Private toilets	34
Street Lights	2
Electric connections	37
Average Electricity supply (in hours)	5
Households using solar panels	10
Households using solar lanterns	30
Public Taps	9
Households having access to television	37
LPG connections	32

Table 7: Overall asset composition of the village

The unavailability of other basic amenities like school, Panchayat Ghar and temple makes it difficult for the villagers to mobilize activities during the winters when the valley observes heavy snowfall and it becomes difficult to move out of the village. The land allocated for the houses are equally distributed like to agricultural

land and hence no spatial conflicts related to resource distribution are observed. The houses are made of bricks while the rooftop of every house is covered with leaves which is useful in insulating the room during winters and even during summers. The street also witnesses a school at the end point of the village however the school was closed down due to poor educational facilities provided by the government.

Employment

Occupational distribution						
Farming and Livestock Rearing	Livestock Rearing	Govt. Service	Business	Private Service	Student	Unemployed
79	1	24	1	9	45	8

Table 8: Occupational distribution of residents in the Aye village

Being a remote town, Aye has kept up a wide variety of decent variety. Almost 42% of the working populace participate in horticulture regularly while 13% of them are utilized in Government administrations. 24% of the

populace is under studies demonstrating a solid view of town towards training. Any employment movement ought to guarantee solid utilization of any family unit. A fine little extent of working populace occupied with subsistence agribusiness. It guarantees accessibility of

sustenance for utilization. Furthermore, no family families were found with the instance of kid hindering. Henceforth, the town's employment execution was clung to sustenance and manageability.

The villagers want to do and organize agribusiness over another arrangement of exercises for employment. In spite of the fact that from a financial point of view we get the opportunity to see a lot of villagers being government representatives. The dissemination of the travel industry in the Nubra area has made footing towards the travel industry among the villagers. The villagers don't have exceptional abilities that have major financial criticalness, thus we see aptitudes not being passed on to the who and what is to come. Animals raising is viewed as boisterous by the villagers it is apparent that this action is blurring without end. Around four families got debilitated from doing sheep cultivating because of hardships required with it. Agriculture isn't broadly spread, it is considered more to be a convention by the villagers.

Agriculture and Livestock

Agriculture and livestock is an important part of the lives of Ayea villagers. People here do not particularly view agriculture as an economic activity, instead, they view it as a part of their lives. Subsistence farming is quite predominant at Ayea. People here own very small pieces of land. The average landholdings are just a fraction of an acre. Ayea has a net cultivated area of 0.2064 acres.

With crops including Carrot, Cabbage, cauliflower, potato, onion, turnip, garlic, tomato, peas, capsicum. Coriander and Radish. When it comes to agricultural equipment, the villagers are mostly conservative. Even today most of them plough their lands with bulls (yak). The entire village has only two tractors. The tractor is the only mechanized agriculture equipment they use. Chemical fertilizers are non-existent in the village and the entire Nubra region. Moreover, the land is equally divided among all the households and no land fragmentation exist in the village. The cropping season is Zaid period from April to June since it becomes difficult for the villagers to practice agriculture during winters in snowfall. Most of the produce is retained for household consumption and surplus is sold in the Leh market during October month of every year.

Agriculture		Livestock	
Carrot	70	Cow (traditional)	37
Cabbage	69	Cow (High Yield)	7
Cauliflower	71	Bull	8
Potato	93	Horse	2
Onion	91		
Turnip	105		
Tomato	104		
Peas	81		
Raddish	95		

Table 9: The agriculture and livestock availability at the Ayea village

Livestock is also a very important part of the subsistence of the villagers (Angchok et al, 2016). There are thirty-seven traditional cows and seven high yielding variety cows. The villagers do not sell the milk; also there are no milk co-operatives or any market to sell the milk. The

village has eight Bulls (We have considered Dzo, a highbred of Yak and cow, also as Bulls). These bulls are used to plough the field. We got to know that sheep farming also existed at Ayea, but due to lack of transfer of skills related to sheep wool weaving, the villagers have

stopped pursuing this activity. Interestingly the village has two horses, which will be hired by the Indian army during winters, as horses would be the only means of transport along the Indo-china borders during harsh winters. It is important to understand the role of livestock at Ayee from different perspectives.

Income: Livestock is a wellspring of auxiliary pay for some families in the village particularly the asset poor. Dairy animals and bison if in drain will give customary salary to the domesticated animal farmers through closeout of the season. Livestock like sheep and goat fill in as wellsprings of pay amid crises to meet exigencies like relational unions, treatment of ill people, kid training, and renovating houses as and when required. The village has seen few uses of livestock used for commercial purposes.

Business: An extensive number of individuals in the village being less proficient and untalented rely on agriculture for their jobs. However, agribusiness being regular in nature could give work to a greatest of 180 days in a year. The landless and fewer land individuals rely on animals for using their work amid lean season. The village employs all the working population of the village for a period of 180 days from April to June, while most of them migrate for seasonal work in the agricultural season to Leh District of Ladakh.

Sustenance: The domesticated animal products, for example, meat and eggs are a vital wellspring of animal protein to the individuals from the domesticated animal proprietors. The per capita accessibility of the production is around 355 g/day; eggs are 69/annum. However, there is no case of poultry observed at the village. Moreover, being a Buddhist village, consumption of meat is dealt with a sore eye.

Government Infirmity: The livestock offers standardized savings to the proprietors regarding their status in the general public. The families particularly the landless which claim livestock are preferred put over the individuals who don't. Gifting of animals amid relational unions is an extremely basic wonder in various parts of the nation. Raising of animals is a piece of the Indian culture. Dairy animals for housewarming services; rams,

bucks and chicken for forfeit amid merry seasons; Bulls and Cows are revered amid different religious capacities. Numerous proprietors create a connection to their livestock.

Waste Management: In rustic regions human and animal excrement is utilized for a few purposes which incorporate fuel (compost cakes), manure (cultivate yard fertilizer), and non-farm uses like walls and other simple construction.

Financial Institutions

The village has hardly any access to the current Financial Institutions. The only financial institution available to the villages is a formal Bank 10 Kms from the village. The villages access formal Bank that is Jammu and Kashmir Bank for depositing the money there is through the pension and MGNREGA work throughout the year. Moreover, the banks are further used to do transactions which deal with the purchase of consumer durable, seasonal migration from Ayee to district Leh and a small proportion of health expenditure is incurred every year.

The village-based on subsistence agriculture as shown little or no need of any Financial Institutions as the transactions are primarily based and buying household items and expenditure is made on agriculture. Since most of the students of the village study in Leh district and private schools Lamdon, a serious expenditure or any other entities are hardly seen. Moreover, the village has seen 0% of household taking any loan or other financial institution services in past decades. It also means the enterprising level of the village purchase which is extremely poor and lies to meet basic needs are pursued.

Being the remotest village of Nubra Valley, Ladakh, Ayee village lacks proper financial opportunities. It is quite evident that the villages are not even aware of different financing options available to them via government or private sources which can further increase the productivity of their agriculture practices. Moreover, the village has become immune to the financial crisis in all the axis of life and has organically developed a resistance structure to all financial needs. This serves as an example

of house economic development of an individual can further be regressed when financial opportunities or not available to a community. Lack of financial institutions has restricted the villagers to think for secured employment that can leave them pension in future. Hence poor availability of financial institutions has decreased the entrepreneurial abilities of the village.

A very important element of remoteness can be observed through the geographical location of the village

where it is situated on the left side of the Siachen river which is hard of any strategic importance to the Jammu and Kashmir Government and the Indian government. Moreover the same has been the case of sir with another five villages situated on the left bank of the Siachen Glacier. 20 villages include the panchayat which is Kobed. Says the immunization process has taken its roots in the village it becomes difficult to include financial development across the villages.

Education and Schools

Kobed Middle School			
One Way Distance (km)	4		
Type	Government		
Grades Taught	Middle Schooling		
Now		5 yrs. Ago	
Total No. (Students)	% of Female in tot	Total No.	% of Female in tot
10	50	25	45
Students Getting Full Fee Concession	100%		
No. of Classrooms	5		
Electricity	1		

Table 10: Education and schooling status of the Aye village

Education is one of the key pointers of the economic development circumstance of a nation as expanded proficiency rate prompts upgrade of a nation's human capital. Education likewise gives better business prospects and gives a higher financial status

(Desai, 2012). Low training dimensions are very clear among occupants who are 40 years of age and more established. Almost 50% of the populace has reading and writing capability not as much as the registration confirmed through unstructured interviews. Since the greater part of the populace is under thirty years of

age, proactively advancing instruction would help in transforming the youthful populace into potential human capital. Consequently, Fostering education is required at the pace where combined and community-oriented learning can occur.

The village has seen the recent phenomenon of development only when the students of the village decided to choose private and government schools in the Leh district of Ladakh. The village has a school which was functional 2 years ago and that closed down

because of poor availability of teachers and low attendance ratio. The kids would drop out after 9th standard enjoy the poster at Siachen Glacier. The dropout rate was on a surge during the early 21st century which then went down due to educational interventions made by alternative educational institutions like SECMOL. Thought the dropout rate has diminished, the school of the village is non-utilitarian from recent years. The instructor of the village has guaranteed that kids are sent to close-by schools.

Facilities (Nos.)	Smart Classes	25	0
	Library	26	1
	Furniture for Teachers	27	4
	Furniture for Students	28	0
	Black-board	29	5
	Chalk-duster	30	15
	Laboratory	31	0
	Playground	32	1
	Computers	33	0
	Internet Connection	34	0
	TV/VCR	35	0
	No. of Students Eligible for Free Books	36	10

Table 11: Facilities available at the Ayee village

The schools situated in the panchayat have proper and clean water drinking facilities. Midday meal served in the schools even during the winters. Parents have shown little concern over the choice of school in the nearby villages. However, a teacher residing in the village has motivated parents to be more aware of the future opportunities that education as a tool and bring for the children. There are hardly any graduates present in the village. The idea of schooling and education is restricted

to understand day today no answers of Living a village life when agriculture turns out as the only opportunity to sustain. As discussed earlier, an alternative schooling system like SECMOL has increased the acceptance of education as the need to mingle with the rest of the world. Moreover, government and non-government organisations have made negligible efforts to improve the educational status of the village.

Total Number of Teachers					
Now			5 Years Ago.		
6			12		
Teachers (Now)					
Gender		Qualification			
Male	Female	Under Graduate (High school, diploma, etc.)	Graduate (B.A., B.Sc. B.Com, etc.)	Post Graduate (M.A., M.Sc., M.Com, etc.)	Specialized Courses (B.Ed, M.Ed, TET, LT, etc.)
3	3	1	0	0	5

Table 12: Teachers education qualification and status at the Ayee village

There are two schools situated in the panchayat two kids of the village study in the 4th standard. these schools have a student turnout of 9 kids which has decreased from past three years. The schools have required facilities which don't stand at par with the government and private schools in Leh district of Ladakh. Moreover, it is the need of the hour to bring all the schools of the nearby villages into one big government school where the kids can study in a more conducive and peer influence environment. Nearly half of the population has education qualification less than matriculation. Since more than half of the population is less than thirty years old, proactively promoting education would help in turning the young population into potential human capital.

Health Services and Hospitals

The village has seen negligible expenditure on healthcare. There is a PHC (physical Health Centre) situated in the panchayat which is nearly 5 Kms from the village. Moreover cases of common cold are the most common health problems seen in the village. Amchi, who is the traditional healer visits the village twice a year and distributes traditional Tibetan medicine for problems related to bones and high blood pressure. A very few

households (7) approach private health care clinics and government hospitals for the above-mentioned problems.

The village has two Asha workers who are not properly equipped with tools and training to provide better health practices to the village. There was only one live birth since last year and that too took place in the Leh district of Ladakh. The health care services during pregnancy are present in the government hospital situated in the Panamic block of Nubra Valley. As far as the Healthcare expenditure is concerned, no financing was done through debt. Overall the village is immune to health-related problems and portrays a better health status.

Governance and Welfare Programs

Ayee village observes one of the poorest governance systems among all the villages of Leh district of Ladakh. Moreover, the intervention for economic and social development in the area also suffers on multiple domains of development (Dame & Nüsser, 2008). The panchayat of the village is not functioning since 2015 and all the major development initiatives are facilitated by Sub District Magistrate (SDM) placed at Diskit, Valley headquarters in the Leh district of Ladakh. An interesting

aspect of the village is observed in equal participation in development activities irrespective of income and gender status of the villager.

MGNREGA has been the most successful government scheme performed at the village. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) utilizes one part for every family unit consistently for least 90 days timespan. The assets are discharged on task to extend the premise. The wage got from the work is straightforwardly exchanged to the ledger. A normal wage of Rs.146 is paid every day for the exercises. The work performed fulfils the parameters of the auspicious arrangement of wages and work and legitimate circulation of assignment. Exercises pertinent for town provincial advancement are attempted through MGNREGA conspire. The town has seen the development of Ling street for an appropriate network with rest of Nubra Valley and Ladakh, water waterways for a legitimate stream of stream water to the town and a couple of fix and support of religious Stupas and structures in recent years. The assets allotted for MGNREGA work seeks after a clear channel of community development. The projects are released from government and a short time later passed on to Panchayat through Block Development Officer. Ayee has seen a decent portion of government plans profiting the villagers.

The plans alongside MGNREGA have given them negligible advantages in past years. UJALA (Unnat Jyoti by Affordable LEDs for All) Scheme has profited every one of the 37 family units by giving every family a lot of three LED knobs at an expense of Rs. 100 each. Also, a few family units have profited from Indira Awas Yojna (IAY) with advantages extending from a lakh to three lakhs. Late morning Meal (MDM), Aanganwadi and ASHA (Accredited Social Health Activists) are likewise some other government benefits appreciated by the villagers.

Climate Change and Coping Mechanisms

Climate change as an issue has been addressed by the villages in terms of the rainfall, the snowfall and the water table. Nearly every household surveyed presented their concern to climate change by talking about the

decrease in the level of snowfall over the past few years. Moreover there is a concern for unseasonal rainfall that the villages experience during the agricultural season from April to June. The villagers also discussed increasing water table which further affected the agriculture practices of all the households. The reason quoted and also significant as the geographical location of the village is in one of the coldest places of Ladakh resulting in cold oriented perspective to climate change.

The village has proved its immunity to shocks over the century. No case of drought, flood, scarcity of any resource has been observed in the village. Talking further about the covariate shocks, the village has been gifted with a geographical location that ensures availability of all the possible resources needed for survival and protection from any natural calamity that can possibly result in a disaster for the village.

Interesting, the sample surveyed haven't gone through any idiosyncratic shocks in the past year. Moreover, any shock, if observed is seen at the village level rather than at the household. No crop failures have been observed as the geographical advantage of practising agriculture at an altitude of ten thousand ft ensures protection from pesticides and heavy rainfall. Hence it is appreciative to note that one of the villages of the country is immune to possible disasters and economy failure in future.

Income and Consumption

The capacity of families to meet their most essential needs is a vital proportion of financial steadiness and prosperity. While neediness limits are utilized to assess the degree of genuine financial hardship in our general public, family budgets that is, the pay a family needs to anchor protected and fair yet-unobtrusive expectations for everyday comforts in the network in which it resides offer a more extensive proportion of monetary welfare.

The villagers won't burn through cash except if they are certain about their own financial circumstance and quality. This implies they like having and keeping a vocation with the capability of advancement. Boosts in salary and tax breaks can put more cash into every individual's pocket. As these conditions combine, buyer

certainty of a villager for family consumption would likewise increase.

The same is the case with the Ayee village. The village creates an environment of circular consumption where very little expenditure outside of what is produced by each family is consumed. Hence, the economy of the village fails to open up to the market leading to contracted circular consumption in the economy. Hence, the village faces opportunity crisis however they have been able to support healthy meals and a good standard of living for their family.

On an average, a family incurs an expenditure ranging from Rs. 300 to Rs. 9000 while most of the families fall under the minimum expenditure range of Rs. 2000 **per month**. Since, most the consumption is derived from agriculture produce it henceforth restricts incoming expenditure on purchase of products from the market.

A significant consumption pattern hasn't been observed at the village while the income pattern resides the reflective pattern of similar earning of households. The major source of income is from pension followed by MGNREGA. An important point to note is that a secured income from pension has affected the entrepreneurial ability of farmers in the village and hence they pursue farming for personal consumption rather than for economic development.

Conclusion

Ayee village has sustained itself as an agriculture-dominated village of Nubra Valley. It is very important to understand that any village which has sustained itself on subsistence agriculture would have problems related to resources that are involved in earning the livelihood for their families. I have this understand how did the idea of development is sometimes not related to the idea of economic activities while it is the notion of sustaining a

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community based on moral and religious principles that don't result in creating a more conservative society.

Ayee has significantly shown a consistency in the consumption pattern throughout the families residing in the village. Ayee is a mixture of culture, individuals and exercises. Any intercessions managing a village issue needs to consider the part of the previously mentioned pivotal of village life. The issues at the Ayee village have turned into an issue over some stretch of time. It requires an intercession that is reasonable, economy situated and achievable. A plan of action spinning around horticulture can include the convergence of cash in the village economy. Consequently, giving enough financial assets for establishing collective enterprises can be capitalized in the village.

The village though is immune to a lot of shock and calamities, faces the problem of developmental paralysis as they fail to interact with the markets and restrict themselves to their own community. In a way it is acceptable as they are able to preserve their culture in the changing world. But at the end of the day, it is important for them to interact with global world and ensure they aid the coming generations to experience development in a more connected way.

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The Study of Rain Water Harvesting

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Introduction to the Village

Rajamonapalli Tanda is a small village in the Nallacheruvu subdivision of the Anantapur District of Andhra Pradesh with a total household of 70 families. The nearest town to the village is Kadiri. The village falls under Kadiri forest reserve area which has a population of 300 consisting of only 40 intermediate students and five of them are graduated. In the village, there is only one elementary school consisting of 15 students. For their livelihood, the people of the village depended upon Groundnut farming and for irrigation purpose, almost 90% farmers depend upon rainfall. The village has five check dams in which three are working and one functional borewell. There is no proper connectivity, no shops, no hospital and no supply of tank water in the village.

Identification of the Problem

Rajamonapalli Tanda village is a dry region where the annual rainfall is around 500 mm. Drought adaptation has increased in this village and 90 percent of agriculture is dependent on rainfall. The amount of rainfall may be there, but the main problem is collection and distribution. As there is no proper source of drinking water, the village people go to another village which is 5 kilometers away from the village to collect drinking water where the water purifier plant is working.

Review of the Literature

Rainwater harvesting consists primarily of capturing, processing and ultimately using collected rainwater either as the main source of water or as an alternative source of water. There are examples of systems supplying water for domestic, commercial, and industrial uses as well as for farming, livestock, groundwater recharge, flood control, process water. The definition of Rain Water Harvesting is both simple and ancient, and systems can vary from small and primitive, such as

adding a water butt to a downspout of rainwater, to large and complex, such as those collecting water from many hectares and serving large numbers of people.

There are several specific components in all rainwater harvesting systems:

- A catchment area from which rain, e.g. a roof layer, is collected.
- A process for moving water to a storage reservoir from the catchment surface.
- A reservoir where, until needed, water is stored.
- A device used to extract water from the reservoir.

Objectives of the Study

The main objective of rainwater harvesting is as follows:

- To study how collected rainwater purified in aquifers to be consumed as drinking water and consumable for domestic purpose.
- To increase crop production and reduce the use of groundwater
- To enhance the availability of groundwater at a specific place and time and utilize rainwater for sustainable development.

Brief Description of the Study (Research Design)

The case is based on Primary data collection in which 55 households were covered. And Simple Random Sampling is done in which each member of the population has an equal chance, or probability, of being selected.

Story Line

Challenge

Tank size is a compromise between cost, water volume used, the length of the dry season, etc. It is advisable to

construct a small tank first before trying a large one. Rainwater is typical of good quality and before use does not require treatment. However, in the village houses has a chimney, the water may become smoky. Therefore, high chimneys are preferred. Water is collected and stored by PVC, bamboo, etc. roof gutters. A good cover, keeping out light and bugs, and a filter, keeping out all sorts of dust, is the most important thing to ensure water quality. The tank has to be covered from emissions by a concrete shield. Small fishes can be kept in the tank to keep it free from insects. After each dry period of more than a month, the machine should also be tested and cleaned. It may be appropriate to paint the outside of metal tanks about once a year. Throughout the year, leaks must be fixed, especially from leaking tanks and taps, as they pose health risks. Shared roof operation and maintenance are more difficult. Ideally, one person should be responsible for monitoring the system's regular cleaning and occasional repair, water usage control, etc. One option is to sell the water which provides income for operation and management and water usage organization. Where a community system has been installed by households (e.g. where several roofs are connected to one tank), users may want to set up a water committee to manage operation and management activities. The duties may include collecting fees and monitoring each family's work of the caretaker and the water used. Unpredictable rainfall is difficult to predict and rainwater availability can sometimes be reduced by little or no rainfall. The initial cost is also high for the Rainwater Harvesting System.

Response

The cost of recharge to the sub-surface reservoir is lower as compared to surface reservoirs. The aquifer serves as a distribution system and it also increases the productivity of the aquifer. For storage purposes, no land is wasted and no displacement of the population is involved. Groundwater is not directly exposed to evaporation and pollution. Storing water underground is environment-friendly. It also reduces flood hazards. Also helps rise in groundwater levels and mitigate the effects of drought.

Roof Top Rain Water Harvesting helps to provide water

right near the household, lowering the long-distance walks burden of water collecting. Harvested rainwater is a renewable source of clean water that can be used for residential, garden watering and agricultural activities on a small scale. A rainwater harvesting system is a low cost, accessibility, and easy household maintenance. Although the capital costs are high, there is typically no major spending associated with either service or maintenance. The harvesting of rainwater seems to be a beneficial way to minimize water scarcity.

Action Taken

Rain Water Harvesting System will help Rajamonapalli Tanda village to overcome the problem of Water Scarcity. Since in this village, people face a lot of problems regarding drinking water and for domestic purposes. The government should provide some guidance to the village regarding Rain Water Harvesting by campaigning and training. Also, provide some subsidy system to the people since the initial cost to install this system is quite high. NGOs working to this village should also look into this and provide some support and guidance so that villagers will be able to know the importance of the Rain Water Harvesting and know the efficient way to use that Harvest Water when implemented. This will also help the village to increase their crop production as its irrigation system will enhance by implementing this plan.

Questions for Discussion

1. What are the alternative sources of water in case of unpredictable rainfall and rainwater availability and rainwater be reduced to little or no rainfall?
2. Will Government help the villagers as the initial setup cost is quite high for the Rain Water Harvesting system?
3. How to ensure that people know the importance of Rain Water Harvesting?
4. How well does the Rain Water Harvesting satisfy the water demand?

Lessons Learnt

One of the primary constraints affecting rural livelihoods,

particularly in the Dry Zone, is the lack of access to safe drinking water. This situation affects the poor more than the community's wealthy people. Rainwater harvesting systems have been implemented using the roof as a household catchment, a measure to minimize water and sanitation problems. The harvested rainwater was intended for use with or without treatment for drinking and other domestic purposes. If their scheme is to be subsidized, the beneficiaries provided part of the system to obtain ownership. Economic reasons and a delayed ability to use rainwater provide the required benefit to the receiver. Awareness also plays a significant role in the system's adoption.

Course Positioning

The case will be suitable for the course on Rural Development and Rural Management. It helps an individual to know the importance of every drop of water. This case can be used in the course Rural Livelihood System so that students have an idea regarding Rain Water Harvesting System. Also, this can be included in the topic of social entrepreneurship research area. This case can be used in offices and micro-planning to plan and provide an example to make plans and funds for the villages which faces water scarcity mostly in the Dry Land area. The case can be used in the managerial analysis of the present education system for teaching in colleges, especially in Rural Management course where we can do case analysis, situational analysis, and come up with the decision problems and find alternate solutions to the problems when unpredictable rainfall hits the village.

Conclusion

The present study focused on the issue of availability of quality water for household consumption, Crop irrigation, and scarcity reduction using the technique of Rainwater Harvesting. The Harvesting of Rainwater is one of the most cost-effective measures to overcome the water scarcity problems faced. This approach calculates the rainwater harvest potential based on the characteristics of the catchment area. Therefore, the amount of water available from the catchment depends on the average annual rainfall, the characteristics of the catchment area and the extent of the catchment area. The water demand can be determined by comparing the water availability of the catchment area and the real water demand. Hence, if this project is implemented then the problem due to water scarcity and quality of water will be solved.

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Photos



The Study of Market Scenario in Luthong Village

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expect substantial changes in the scenario.

Introduction to the Village

Luthong Village, situated seven kilometers away from the district head quarter Khonsa of the Tirap district in Arunachal Pradesh. Located at the eastern most tip of the country, Arunachal Pradesh is adorned by the first sunlight of the country. That is why is called the “The land of the Dawn-lit Mountains”. The village is surrounded by a range of captivating mountains covered with green forest. People of the Nocte tribe live in this village and use the nearby forest for slash and burn cultivation. The main crop is millets. Most houses are made of bamboo but a few concrete houses are also present. The people still consider the king or “Raja” as the head of the village and he is respected in the community. The tribal religion was replaced by Christianity in the late 70s when the Christian missionaries visited the place. All the people are Catholics as they believe in unity above all.

Identification of the Problem

Being a small village there is lack of shops for buying any product. People had to go to the nearest town Khonsa which was seven kilometers away to buy everything. The old people had no choice but to rely on the young ones to get any essentials. Access to basic things in the village is an issue.

Review of the Literature

“India’s way is not Europe’s. India is not Calcutta or Bombay. India lives in her several hundreds of villages.” This was said by Mahatma Gandhi. Markets are the blood of the country is the body. Despite several five year plans, the country has not been able to connect the rural areas with proper functioning markets. There are also logistical problems due to difficult terrains. Today the corporates are eyeing the rural markets due to its untapped potential. The development is accelerating due to increase in purchasing power and literacy. The dynamics of the rural market is changing and we can

Objectives of the Study

- To analyze the lack of market linkages in Luthong Village.
- To observe the effect of lack of shops in Luthong village on people

Brief Description of the Study (Research Design)

Type of data collection:

For this case study, both primary and secondary data collection methods were used. The people of the village were interviewed and asked about the impact of the intervention and the situation before it. Research papers and articles were referred to obtain a greater understanding of importance of market in a society.

Process of study:

This study was done during the Rural Living and Learning Experience (RLLE) component of Xavier University where the students were residing in the village for 45 days. The students closely observed the aspects of life of people in Luthong and drew conclusions for research purpose.

Story Line

Challenge

Luthong is a small village consisting of only 55 houses. It had no market or any kind of shops. To buy any product, even for the basic things, one had to go to Khonsa town which is seven kilometers away from the village. The terrain is hilly and there are unlevelled and difficult roads that lead to the highway. There is no reliable transportation channel to the town. Few commercial vehicles that are going to Khonsa coming from other far off places are the only way of transportation. Not many

people have vehicles in the village. So, travelling seven kilometers was a very tedious process for the people in the village. This is almost an impossibility for the older people who cannot walk properly. Mr. Ganphu Soyang is a member of the village. He works for the police department and usually stays away from home for long duration of time. His parents, wife and two sons stay in the village. Unavailability of shop was a bigger problem for them as they did not have anyone in the family to buy products for them when Mr. Soyang was away. His parents were too old and his two sons were very young. They had to rely on other members of the village to buy things for them. Most of the time they face difficulties as many people have their own work to do and cannot help them all the time. As the income of the family is not very high they could not buy things in bulk and store them. Moreover, there are many perishable products that cannot be stored for longer duration.

Response

Mr. Soyang was helpless about the situation of his family. So, he decided to start a small shop in his house premises. Then he went to the chief of the village to ask permission. As per their customs, anything that is being done in the village has to be informed to the chief. Then it was communicated to the people of the village. People were happy and relieved to get the news. Now he started to build the structure of the shop. The village has mostly bamboo houses as bamboo is abundantly available in this part of the country. He used bamboo to setup a small structure for the shop just in front of the house. Then he contacted one of the wholesalers in Khonsa for different products he wanted to stock. He hired a commercial pickup truck to transport the products from Khonsa to Luthong. It was decided that in his absence, the shop would be taken care of by his wife.

Action Taken

Mr. Soyang started the shop with vigor. He had basic products such as Wheat, pulses, turmeric, salt, washing powder and soap, bathing soap, instant noodles etc. Initially he bought small quantity of stock to test. People received the shop positively and thanked him for taking this initiative. This also helped his family. In his absence,

they could have access to basic things without having to go a long way to the town. He had invested his own money in the venture. Soon that money was recovered and he invested some more money into his shop. He made a small profit from it.. He also has plans to increase the size of the shop and build a concrete structure in place of the bamboo one.

Questions for Discussion

1. What are the other alternatives that can be proposed for this problem? Discuss.
2. Suggest methods to increase profitability of the shop.
3. What are the possible outcomes if another person starts the same business in the area?

Lessons Learnt

The case study aims to teach students how access to proper market is a difficulty in the remote villages of the country. A small intervention such as Mr. Soyang's can immensely help the people. We also learn how the people react to the market when it's made available.

Course Positioning

Rural Livelihood System:

This case study can be linked to the subject Rural Livelihood System as the story tells about the market scenario of Luthong village. Lack of a shop hindered the livelihood of the people very much. Setting up the shop was a huge help for the people of the village.

Conclusion

Lack of market linkage is a serious problem that hinders the development of an area. If the people in need can be connected to the market then the productivity of the country can improve exponentially. Lack of roads and transportation also play a pivotal role in this aspect. Still people like Mr. Ganphu Soyang are helping the community and trying to build a temporary bridge between the people and market until a robust solution can be found.

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Photos



Front side of the shop with Mr. Ganphu Soyang's wife



Inside the shop

The Study of Water Tankas in Barmer District

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Introduction to the Village

Nawora Bera is a large village in Barmer district of Pachpadra Tehsil, Rajasthan, with a total residence of 352 families. The village of Nawora Bera has a population of 2122, of which 1123 are males, while according to the 2011 Population Census 999 are females.

In the village of Nawora Bera, the number of children 0-6 years old is 483, making up 22.76 percent of the total village population. Nawora Bera village's average sex ratio is 890, lower than Rajasthan's state average which is 928. The Nawora Bera child sex ratio as per census is 894, higher than the average of 888 in Rajasthan. The village of Nawora Bera has lower literacy rates than Rajasthan. In 2011, Nawora Bera village's literacy rate was 44.23 percent compared to Rajasthan's 66.11 percent. In Nawora Bera Male literacy is 53.80%, while female literacy is 33.46%. Of the total population, 1166 were engaged in work activities in Nawora Bera village. 47.08% of workers describe their work as main work (employment or earning more than 6 months), while 52.92% participated in marginal activity providing a livelihood for less than 6 months. Of the 1166 workers employed in the Main Employment, 405 were farmers (owner or co-owner), while 55 were farmworkers. (Source:<https://www.census2011.co.in/data/village/87392-nawora-bera-rajasthan.html>)

According to the constitution of India and the Panchayati Raj Act, the village of Nawora Bera is managed by Sarpanch (Head of Village) who is elected village representative.

Identification of the Problem

Barmer, the westernmost district of Rajasthan, located in the Thar desert region is surrounded by Jaisalmer from the north, Jalore in the south and Pakistan to its west. Even after 72 years of independence, Barmer district is

not independent in its water facilities. The district

has a large temperature variance due to its location, from 51 ° C in summer maximum to 0 ° C in winter. In these severe conditions, we could hardly imagine life and how its inhabitants live. Even today people have to walk miles to fetch water for drinking. All this happened because people started forgetting their traditional techniques of water harvesting and opted for modern techniques which are not sustainable with nature.

In 2006, Barmer district being arid region received a severe rainfall which deluged the entire district. It was so intense that the desert became a lake cluster. Its soil water is highly saline due to the arid region and is unsuitable for daily use, be it for drinking or farming. Its groundwater contains a high level of fluoride, which is responsible for several disorders such as diarrhea or joint pain. Indira Gandhi Canal water reached the village Nawora Bera about 25 years before through pipelines, but now the pipelines and water tanks have no water in it.

Review of the Literature

Shrivastava, Sharma, and Sharma (2013) discuss the effects on groundwater caused by Indira Gandhi Nahar Pariyojna (IGNP) in the western districts of Rajasthan. They conclude in their Research Paper that the area's groundwater is saline and brackish. The lack of development of groundwater has also led to an increase in water levels and salinity.

Spross (2015) opine is that with time, it has become apparent that the role of the wells in lowering the water table. Previously, traditional wells and ponds began to dry up in water-safe areas. Even so, 80% of India's water supply to this day comes from bore wells, and the Indian government has not yet made any rules on drilling them. Continued water safety remains a major concern for millions of citizens who currently do not have an

immediately viable alternative to swift transition to more sustainable options.

Objectives of the Study

The objective of the study is “to study the water problems faced by the people of the village Nawora Bera in western Rajasthan”.

Brief Description of the Study (Research Design)

1. **Type of data collection:** Primary data collection by asking a set of questions from the people of Nawora village in Barmer district for data collection of water tanks. Secondary data (census 2011) observations for the total population of the village.
2. **Sample Size/ type of sampling:** Random sampling and the sample size is 50 households.
3. **Process of the Study:** Firstly, talked to villagers about their problems and found out that mostly everyone had a problem with water management. Prepared a questionnaire and asked the members of the families in the village.

Story Line

Challenge

Mr. Umeda Ram, aged about 80 years, lives in a small village called Nawora Bera. Name of the village Nawora Bera means “New well” in the Marwari language. This village was named after a well, which was built around 200 years ago. The well had been the only source of water in this village since the village itself came in existence. Well is deep around 150 feet and was built by the ruling communities of that time, residing in the nearby areas. Mr. Umeda Ram says that two men named Haqke Khan and Jhale Khan took the responsibility of building the well. When the well was completed, people from far away villages used to come to fetch water from the well. Slowly people started migrating in search of water and shifted near the well and a new village Nawora Bera came in existence. Umeda Ram Ji’s great grandfather has shifted from Lakhe ki Dhani in Barnawa

in Rajasthan to the new village Nawora Bera.

Soon near about 200 families made their homes near the well. Villages use to spend the whole day fetching water from the well, with the help of big *koh*⁶, put in the well to fill and pulled by 10 to 11 people on the surface of the well. The water pulled up by one *koh* use to fill 9 water pots. As filled *koh* was very heavy to be pulled by humans, villagers having camels and bulls use to tie the rope around them and pull water out.

Umeda Ram Ji used to go with his family and stand in a long queue of villagers to fetch from the well. It used to take 5 hours or sometimes the whole day for his family’s turn to come to fill their 5-6 water pots. The water of the well was quite saline but people use to anyway drink it and used it for other household work. Mostly used it for cooking and drinking. They didn’t waste much water by bathing only once a week and cattle drank water nearby the well itself.

Response

Umeda Ram felt and witnessed that his wife and children fetching water all day, wanted to change the water management of his family as it was very tiring and exhausting for family members. He remembered his grandfather telling about how to construct a *tanka*⁷. They couldn’t construct because they didn’t have money to buy cement, rock, and sand. Umeda Ram wanted to construct a *tanka* near his house so that water can be stored in it and his family won’t have to worry about water for 4-5 months once the *tanka* is full by rainwater or water from the well. So, in 1979 Umeda Ram saved money by selling his goats and a cow and bought cement, rock, and sand. He dug a 9 feet pit, arranged the rocks and leveled the surface with a mixture of cement and sand by his own hands without using any tools and made an *open tanka* (Refer Picture-2 in Annexure). The *tanka* got filled by the rainfall, Umeda Ram’s family was

⁶ Koh - Is a bucket made of the tire with wood handle. As in the old days, tires were not available so it was made of cow’s skin. (Refer Picture- 1)

⁷ Tanka - The *tanka* takes the form of an underground water tank, which is usually made of stone, brick or concrete.

tension free for a few months and rainwater was also not saline so they decided to use the tanka water for drinking and for other household work, the water from the well was used.

In the later years, Mr. Amra Ram Chowdhary (MLA) of the district installed a generator to the well in the year 1993. It got easier for the people of the village to take water out from the well. The generator saved a lot of energy and time of people.

Generally, the open tankas had few problems like in summers, water would get evaporated, water used to get dirty by dust and goats and cows would drink the water.

Action Taken

In the 1990s the concept of *closed taanka* (Refer Picture-3 in Annexure) started getting popular in the western part of Rajasthan. So in the year 2000, Idea foundation constructed closed tankas for the households of the village.

In 2006 when MGNREGA scheme was implemented. Government started making closed tankas for every household who have a job card and a ration card. Umeda Ram constructed his 2nd closed tanka under the MGNREGA scheme.

Under the scheme, firstly a form for a job card is submitted by the person in the Panchayat. Form is signed by the Sarpanch and Gram Panchayat makes the online request of the job card and in a few days the applicant receives the job card.

Secondly a person's tanka has to be constructed, so he makes a request in the panchayat. The Sarpanch then takes the measurement of the area where the person wants the tanka to get constructed and sends it to Panchayat Samiti. The request gets passed to Zilla Parichit Samiti, then plan is made and sent to the village sarpanch. Then a job card of 15 people living near the construction area is collected and they do the construction of the tanka. The Labour gets the wage on a daily basis. After all the work gets completed, sarpanch

sends the bill of the expense to the Block Development Officer (BDO). On the approval by the BDO, sarpanch receives the money after a year. Labour money comes within 15 days. Construction of a closed tanka costs 1 to 2 lakhs.

In June 2017 the government constructed a water tank in the centre of the village for storing the water from Indira Gandhi Canal and promised to connect water pipes from the water tank to every household of the village. But this has not taken place yet. The water supply of the tank is only connected to the government school of the village.

About Tanka

Taanka, also known as tanka or kunds, is a traditional technique of rainwater harvesting common to Rajasthan, India's Thar desert region. It is intended to provide drinking water for a single or small group of families, and in these arid regions it is an important element of water safety. A Taanka is a cylindrical underground rainwater storage cistern usually 10 ft or 10 ft (3.05 m or 3.05 m) in size where rainwater from the rooftops, a courtyard or natural or artificially prepared catchment flows into the paved pit through filtered inlets made on the outside wall of the structure where it is stored and can be used by one family during the dry season. Once fully filled, the water is sufficient for a family of 5-6 members for a period of 5-6 months, and saves it from everyday-water-fetching-drudgery.

The technique was largely abandoned in the later 20th century as pipes lines or hand pumps were laid, it was when faced with drought like situations, inadequate supplies of piped water on the account of growing population, which also resulted in depleted or contaminated ground water, this traditional method was revived, along with other traditional rainwater harvesting structures like, *Naadi*, a village pond and *Beri*, a small rainwater-collecting wells, especially for supplying drinking water.

A Taanka is a traditional rainwater harvesting technique based on community and individuals, native to the Thar Desert region of Rajasthan. The taanka takes the form of an underground water tank, which is usually made of

stone, brick or concrete. When installed, it collects and stores rainwater (mainly collected during the monsoon season), either from roof rainwater harvesting systems (link) or from artificially designed tank catchments.

Once the water stored in a taanka is completely filled, it can last throughout the dry season and is adequate for a 5-6 family. Most taankas have a capacity of about 21,000 liters, but where resources are available, larger ones can be installed.

The taankas were created in Rajasthan with other partner organizations. To save families and women and girls in particular – from the regular drudgery of fetching water from remote, sometimes unreliable and potentially contaminated water sources.

Questions for Discussion

1. Will modern water management techniques really help in the long run ?
2. What will happen if it doesn't rain for 2 years in the area ? Will the tankas be of any use ?
3. Do we need to return back to the traditional techniques of water management?

Lessons Learnt

The caselet's main aim is to reflect the alarming situation of water scarcity and also it makes us realize that depending completely on the government for every problem won't help us. People of such arid areas have a very rich history of conserving water in very harsh situations of the desert. They just need to look back and start cherishing it again.

Course Positioning

The above caselet can be helpful in studying the livelihood of people in desert areas. The process of getting approval of tanka construction tells us about development administration and policy. Including people in building their own tankas makes us understand about micro and participatory Planning.

Conclusion

The caselet only shows us the struggle picture of one small village in the Thar desert of Rajasthan. There are many such villages who are not having any common resources of water.

Balancing traditional techniques and modern techniques of water management can make people's life easier.

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Annexures

Constructed under	No. of Tankas
Jal Bhagirathi Foundation	130
Jal Grahan Yojana Rajasthan	60
MGNREGA	400
Muslim Welfare Society	20
Public Tankas	33
Idea Foundation	5
TOTAL	648

Table :1 - Total no. of tankas constructed in Nawora Bera and name of the organisations. (Source: Panchayat office of Nawora Bera, Patodi, Barmer, Rajasthan)



Koh' used to take out water from tanka



Open Tanka



Closed Tanka

Questionnaire

1. Do you have your own tanka ?
2. How many tankas do you have ?
3. How much did it cost in constructing one tanka?
4. In which year was your tanka constructed?
5. Is it an open tanka or closed tanka ?
6. How many members are there in your family ?
7. Who constructed the tanka ?
8. Was there any cost incurred by you ?
9. What is the measurement of you tanka?
10. How many litres of water fits in one tanka?
11. For how many months does the water of the tanka go for ?
12. For what purpose/s do you use the water of the tanka ?
13. How do you manage when water gets over in the tanka?
14. From where do you call for water tankers?
15. How many times do you call for water tankers in a year ?
16. What is the cost incurred for one water tanker?
17. Does the water tanker come on time ?
18. Where do you store the water bought by the water tankers ?
19. If you do not have a tanka, then how do you manage your water needs ?
20. Are you happy with the concept of tanka?

The Study of Women Education and Women Employment in the Village Kandarwasa

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Introduction to the Village

Kandarwasa is a large village in Ratlam Tehsil district of Ratlam, Madhya Pradesh with a total residence of 461 households. The village of Kandarwasa has a population of 2090, of which 10044 are males and 1046 are females according to the 2011 Population Census.

The number of children aged 0-6 in Kandarwasa village is 293, making up 14.02 percent of the total village population. Kandarwasa village's average sex ratio is 1002, which is higher than the state average of 931 in Madhya Pradesh. The Kandarwasa child sex ratio as per census is 953, higher than the average of 918 in Madhya Pradesh.

Compared to Madhya Pradesh, Kandarwasa village has a higher literacy rate. In 2011, Kandarwasa village's literacy rate was 74.40 percent compared to Madhya Pradesh's 69.32 percent. Male literacy in Kandarwasa stands at 89.60%, while female literacy was 59.36%.

According to the Indian constitution and the Panchyati Raaj Act, the village of Kandarwasa is governed by Sarpanch (Village Head) who is elected village representative. In this village, the villagers vote for their ward members. There are 17 wards in the village. After electing the ward members, then the elected ward members vote among themselves to elect the Sarpanch.

The nearby villages are Bharoda (4 KM), Sikhedi (4 KM), Palduna (5 KM), Panched (7 KM), Patakhedi (8 KM). Kandarwasa is surrounded in the south by Ratlam Tehsil, Jaora Tehsil in the north, Sailana Tehsil in the west, Khacharod Tehsil in the east.

Identification of the Problem

Education is the main indicator by which a country's growth and development can be delineated, and as such it has held an important place in society. No one can

deny that education plays a vital role in an individual's life as well as in society. In the case of individual education, the mind is disciplined, the intellect is sharpened and the spirit refined. Training is the nourishment of the mind with information and as such it contributes to the development of an individual's integrated personality.

During my study on the village Kandarwasa, I found that female education is not given importance by most of the families of the village. If a family in the village has a son and a daughter in most of the cases parents send their son to private schools whereas at the same time they send their daughter to government schools in villages where the fees are very low as compared to private schools. This shows that people in this village do not want to spend money on girl education. The thinking behind this is, finally, the girl child will get married in the future. So there is no need for education or any higher studies.

Another observation was women are often engaged in those works in which they do not go outside of their houses. For example, in the case of agriculture, male members of the family work in the field and female members are involved in the grading of agricultural products, storage activities of agricultural products in their houses.

The low level of education among the female members lead to unawareness of different entrepreneurial ideas, government schemes, etc. which can help them to enhance their livelihood.

Review of the Literature

The literature reviewed reflects upon the fact that Gender equality and the empowerment of women have clearly been recognized as key to the country's social and economic development over the past decade. Gender inequality originates from the social, economic and

power relationships between women and men that have been built over a very long period of time. Gender inequality is one of the most significant disparities in many societies, particularly in India. In India, female education is not given much importance. This creates a difference in the education level between males and females which further leads to gender inequality as males having better education are involved in earning money. This is reflected not only in education and talent development but also in the more basic areas of food, wellbeing, and survival. In India, women's devaluation and men's social domination continue to prevail. Women are usually seen as burden of dowry, the weaker sex, and deserving of a lower social status than men. This has given rise to social and economic issues. Certain concerns may include abusing women's human rights and having unequal opportunities in schooling, jobs, or birthright.

Some articles reveal that women's empowerment can be said to occur when a woman is challenging social norms and practices that work within the culture in which she lives to enhance her own well-being. Investment in women's capacity building has increased in many developing countries over the past few years. Development programs aimed at improving rural livelihoods in the early 1980s normally targeted men. Nevertheless, these initiatives became particularly focused on women during the latter part of the same decade. The UN and the World Bank have stressed the importance of empowering women, especially the poor living in rural areas. The World Bank has recommended that women empowerment as a key feature of all development programs. Empowering women is considered essential at the household level, not just for their personal well-being and health. Women are often regarded as members of society who pass on social norms and change the quality and quantity of the future generations of a country. Thus, women's investment is seen as strategies that can create the well-being of whole societies. Women have come to be regarded as key sustainability factors. Women's empowerment has become a strategic tool to defeat poverty, and experience has shown that it leads to improvement in households and community living conditions. Studies have shown the links between economic growth,

increased youth education, poverty reduction, and women empowerment.

Objectives of the Study

- To analyze social hindrances in the educational path of females in the village.
- To establish the relationship between education and livelihood.
- To determine the skills of the village women, which can provide income to them.
- To identify the reasons for which there is no Self Help Group in the village.

Brief Description of the Study (Research Design)

This case is based on a field study conducted at the Kandarwasa Village, Ratlam District, Madhya Pradesh, India. A combination of surveys (survey questionnaire attached in annexure) and semi-structured interviews were used to identify the problem and why most of the women in the village are having a low level of education.

Along with this Qualitative methodologies are used to find many reasons behind women's low level of education in the Kandarwasa village.

A sample of 30 households is taken for the survey randomly from the village Kandarwasa and this case is written on the basis of results obtained from the survey.

Story Line

Challenge

Over the past two decades, the number of women participating in the organized labor market has increased. Nevertheless, it is estimated that more than 90% of women in the country are working on the informal labor market.⁸ There are a number of economic, social and cultural obstacles that make it difficult for Indian women to gain wage jobs. Limited access to education is one of many examples of female child

⁸ Suman, Jain, ICT's and women' empowerment, Department of Economics at Lakshmi Bai College, Delhi University, P. 3.

discrimination that, in turn, makes female analphabetism common in India. In general, Indian women have a lack of mobility and often have limited access to credit and technology. In addition, Indian women's land ownership is limited and women's interaction with men outside the family unit is a cultural taboo. Furthermore, women are often not interested in decision-making in India. A man normally makes decisions within the family. Arranged marriages are the norm and as a result of a large number

of young marriages, many Indian women are left without control over their lives at a very young age.

In the village Kandarwasa, many women had never gone to school or had dropped out at an early stage due to the low standard of living and poverty in their home communities. Many girls had left their studies to work with household chores in order to be able to attend school for their other siblings.

The result of a sample survey conducted is as follows:

Total Number of households surveyed	30
Number of males	82
Number of Females	73
Number female working force (18-55 years)	45
Number of women without education among the female working force (18-55 years)	15 (33.33%)
Number of women with education 1 st to 8 th class among the female working force (18-55 years)	24 (53.33%)
Number of women with education 9 th and 10 th class among the female working force (18-55 years)	3 (6.6%)
Number of women graduated among the female working force (18-55 years)	3 (6.6%)

From the above sample survey, it can be found that 86.66% of the total working force among women has education till class eighth and 33.33% of the females who come under the working force have gone to school.

Another interesting finding that was found during the survey was that 18 women which is 40% of the female working force knew to tailor. This is a skill that can provide income to the women in the village. But due to lack of education and lack of awareness this skill is not utilized at all.

Response

While conducting the survey and unstructured interview

it was observed that most of the women in the village have low education and almost all of them are involved in household works. When asked about any other skills that they had which can be used to generate income it was found that most of them know to tailor. And another interesting observation was that most of the households have sewing machines which they use very occasionally for their personal needs.

Due to the low level of education and lack of awareness, this skill of tailoring is not utilized or marketed at all which have the potential to generate income, educate the females and increase their standard of living. According to Mrs. Sita Bai aged 43 years and belong to a family that comes below the Poverty line "If proper

training and proper facilities are provided then women in the village can earn money by tailoring”.

But due to low levels of education, almost all the women in the village are unaware of different Central and State Government schemes that are mainly focused on women empowerment in rural areas. Women in this village are also not aware of the concept of Self Help Group (SHG).

Gender development and mainstreaming require policy interventions that are responsive to gender. The government has recognized that women are equally important in the development of the economy, whether directly as workers or indirectly as members of the care economy. The state government gives women related issues a very high priority. State focus is not only limited to traditional issues such as education, health, but also covers other fields of gender-based public spending, revenue, and policy. The government intends to make women self-reliant and economically strong by supporting in every way of life by formulating schemes, policy and legal provisions.

Some of the efforts by the State Government towards women empowerment are:

- I. The legislative assembly passed the historic bill to give women candidates a reservation of 50% in Panchayat Raj Institutions and Urban Local Bodies.
- II. The decision was made to reserve 50% of the total posts for women in Van Samities. It was also decided that a woman candidate would hold the position of either president or vice-president.
- III. The state government is well aware that if opportunities are provided, women can play an effective role in matters relating to society. Water and sanitation are the main concern of every rural woman, the state government has set up exclusive committees for women at the village level as the nodal water and sanitation implementing agency. The Panchayat and Rural Development Department provides guidance and training to all committee members.
- IV. 33% Of all government jobs, with very few exceptions, are reserved for women.

Action Taken

In the village, Kandarwasa women are living in heavily gender-based communities which discriminates them in multiple ways. The women in this village lack both access to and control over the economic and political resources. As there are no basic healthcare facilities, the women's access to health care is poor and they are frequently becoming victims of physical and psychological abuse. Educating girls is commonly seen as irrelevant within this Kandarwasa village. The women involved in the study are restricted in gender roles that marginalize their position in society and deny them the capacity to make decisions considering their livelihoods.

To enhance women's capacity to participate in the formal labor market, education is the foremost requirement. By identifying the skills (tailoring in this case) that can be traded in the market and can help in income generation, training can be given to women. Training or forming Self Help Groups (SHGs) are the best ways to empower women in the village both financially and socially. By providing training to women in this village can lower gender inequalities, can reduce all barriers in society that lock both men and women in inherited gender roles, providing self-confidence to women so that they can understand the market, etc.

This case provides a scope of entrepreneurship opportunities in this village. Government Organizations and Non-Government Organizations can intervene and can help women in this village to form Self Help Groups and acquire training in tailoring. By providing training, basic education can also be provided to women.

Questions for Discussion

1. Will forming Self Help Groups will ensure the growth of women in the village of Kandarwasa?
2. How to ensure women participation in the formation of SHGs as there are many social barriers in the village?
3. Why is there no Government Organizations and Non-Government Organization's intervention in this village to date?

Lessons Learnt

Education is the key to any type of development in society, be it social or economical. From the above-mentioned case of village Kandarwasa, it is observed that due to lack of education among women they are not able to overcome social barriers and are unable to sell their skills in the market. In this case, the reasons for women's low level of education in the village can also be found.

Course Positioning

In **Rural Livelihood Systems**, various case studies related to the livelihood of the people about how it has changed over the course of time, all the factors and challenges affecting it can be taught in the classroom along with the sustainable livelihood frameworks which helps in managing the rural livelihoods.

In **Social Research Methods**, various methods for conducting research, analysis of the data collected through certain software along with different articles based on the methods can be discussed in class to understand the practical use of the methods in research. In **Social Research Methods**, we were taught how to conduct research on a topic that helps all aspects of human lives: human interactions within as well as with the physical world around.

In the **Rural Living and Learning Experience (RLLE)**, the 'Rural' of the MBA program in Rural Management is put into perspective. Its aim is to apply and understand the theories that we learn in our lecture halls in the real rural context. It's here that we unlearn and relearn what it means to be a manager of Rural Manager.

Conclusion

Women's literacy skills are key to change the asymmetric power structures within these communities between men and women. Education is the only way to raise political, social and business awareness. Sending the women for training is a win-win situation for both genders in the long run. If women are given proper education and making them free from social barriers they can also be self-independent and can add value to the family, the society, and the nation.

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Annexure

Household Survey Questionnaire

Instruction: Please enter NA for all questions in all the three cases of "Did not know the answer", "Did not reveal the answer", and "Not applicable".

I. General information

1. Sheet Name and Number:
2. Name of the surveyor:
Date (dd/mm/yyyy):
3. Name of the Village:
4. Name of Gram Panchayat for the village:
5. Name of the District:
6. Name of the State:

II. Household characteristics

7. Background of the household members:

7.1. Name of the household members	7.2. Sex (M/F)	7.3. Age (in years)	7.4. Education	7.5. Children studying (For Age to 14). Mention N not studying @mention standa if studying	7.6. Are you Bank Account holder?	7.7. Do you have Job Card?	7.8. Do you have Aadhar

8. Household head:

1 - Male headed; 2 - Female headed

9. Type of family as per members staying in:

1 - Joint Family (if not nuclear) ; 2 - Nuclear Family (parents and their unmarried children)

10. Any member of the household staying away earlier, but joined this household recently?

1- Yes , 2- No.

11. Number of working women in the household:

Note: Women whose occupation mentioned within the options of primary occupation. To find working women : working men ratio

12. Number of working men in the household:

13. Are you a Public Distribution System (PDS) member?

1 - Yes, 2 - No

14. Did you avail PDS services anytime in the past one year?

1 - Yes, 2 - No

III. Income, expenses & livelihoods of household

15. Primary Occupation of the household:

Note 1: Mark the income generating occupation and the yearly income generated. Help with the calculation if/when there is a difficulty in calculating the income.

- a. Agriculture -
- b. Collection of NTFP -
- c. Agriculture Labour -
- d. Non-AgriLabour -
- e. Business -
- f. Weaving and Artisanship -
- g. Livestock Rearing -
- h. Government Job -
- i. Private Job -
- j. Others -
- i. Do Mention -

16. Secondary Occupation:

Note 1: Mark only the second highest income generating occupation and the yearly income generated. Help with the calculation if/when there is a difficulty in calculating the income.

- a. Agriculture -
- b. Collection of NTFP -
- c. Agriculture Labour -
- d. Non-AgriLabour -
- e. Business -
- f. Weaving and Artisanship -
- g. Livestock Rearing -
- h. Government Job -
- i. Private Job -
- j. Others -
- i. Do Mention –

17. Total yearly Income of the household (in INR):

18. Total yearly Expense of the household (in INR):

19. Average monthly expense in food (in INR)?

20. Average monthly expense in health (in INR)?

- 21.** Average monthly expense in education (in INR)?
- 22.** How many members in your family between the age 18 to 55 are unemployed?
- 23.** Mention the employable Skills and Art skills known by the members of the household (textual response?)

Thank you for sharing your time with us!

Any comments by the surveyor:

The Problems and Prospects of MGNREGA in Khongjal/Ramsophung Village

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Introduction to the Village

Currently, we are staying in a Khongjal⁹ village (also known as Ramsophung¹⁰) which is located in the Phungyar block of the Kamjong district of Manipur. According to census 2011, there are a total of 324 people living in the village. Among them, there are 156 males and 168 females. There are 44 children in the age group of 0-6 years. All the people belong to the Scheduled Tribe category. These people are basically from the Naga tribe community also known as the Thangkhum community. They speak Thangkhum language. The literacy rate is 74.07 percent. It comprises 122 males and 118 females. There is a total of 152 workers, out of which 77 are female and 75 are males. They are mainly engaged in cultivation.

Table 1 :Demographic details of Khongjal for the year 2011¹¹

Population	Persons	Males	Females
Total	324	156	168
In the Age Group (0-6 years)	44	21	23
Scheduled tribes	323	155	168
Literates	240	122	118
Illiterates	84	34	50
Total Workers	152	77	75
Main Worker	151	77	74
Main worker-Cultivator	141	68	73
Main Worker-other	10	9	1
Marginal Worker	1	0	1
Non-Worker	172	79	93

⁹ Khongjal name is registered name of the village according to Manipur Govt.

¹⁰ Ramsophung is the village name given by the residents of the village in their own local language.

¹¹ The demographic details have been taken from census India 2011.

The main occupation of the villagers is agriculture. The primary crop being produced by them is paddy. They practice Jhum cultivation/shifting agriculture. In this type of farming, they clear a piece of forest and leave the leftovers to dry. After that, they burn that piece of area and leave the biomass to mix in the soil. The burnt biomass helps in improving the fertility of the soil as well as stops the unwanted growth of weeds. Usually, the process starts from the month of February and continues till November. Apart from that the people of the village are also engaged in growing various types of fruits and vegetables like banana, oranges, guava, squash, pumpkin, tomato, brinjal, maize, sugarcane, mango, local berries, bitter beans. But most of such practices are subsistence in nature. They mostly produce for their own consumption. The people of the village are also engaged in the making of traditional shawls and mufflers which has very good market demand. They also sell log woods and burnt charcoals in the market. In the off-seasons, they also work as laborers and carry out the work under MGNREGA.

Identification of the Problem

MGNREGA has been a success in generating alternate livelihood opportunities for the people of the village. Yet there has been a decline in the number of days of work that has been provided to them which shows the lack of support from the government.

Review of the Literature

We say India lives in the villages. Seventy percent of the total population in India are living in rural areas. Most of the people in India are relying on agriculture for their livelihood. The average landholding is about 1.1 hectares which is too low to sustain their life by only doing cultivation. In India, people work as agricultural laborers during the sowing and harvesting time. So the rest of the time, they sit idle having no work. As a result, most people are living with problems like hunger,

poverty, illness, migration, deaths, unemployment. In order to curb these problems, the Government of India enacted the National Rural Employment Guarantee Act (NREGA) in 2005. Now this act is called as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). Under this act, it provides employment to any adult member of the family to work as unskilled labour at a specified minimum wage rate. It is the biggest poverty alleviation program in the world which has started with an initial outlay of INR. 11,300 crore in the year 2006-07 and the budget for 2018-19 was around INR 60,000 crore. The salient features of MGNREGA are¹²:

- It gives a legal guarantee of wage employment to the adult members of rural households who are willing to do unskilled manual labour subject to a maximum of 100 days per household.
- It is applicable to all the villages in the district.
- Every rural household has to register under MGNREGA and job cards are issued to every household within 15 days from the date of application for job card registration.
- Registered job cardholders can apply for a job through individual/group applications.
- A minimum of 10 job seekers shall apply to seek new work under MGNREGA.
- Job has to be provided within 15 days of the application otherwise the people are entitled to an unemployment allowance.
- The village community has the right to choose works under 10 permissible categories.
- The job shall be provided within a 5 km radius of the village. If the job is provided outside the radius then transport allowance will be provided to them i.e, 10 percent of the wage rate.
- All persons will be paid equally irrespective of their gender.
- One-third of the persons should be women and facilities like a creche, drinking water and shade has to be provided.

Extensive research (Abhishek Ghosh, 2014) in the effectiveness of the MGNREGA in the Purulia district of

¹²Data taken from (Salient Features of MGNREGA, 2017)

West Bengal revealed that the MGNREGA was successfully implemented in the villages of Purulia district. The scheme was successful in increasing the socio-economic standards of the people. People were able to do alternate jobs during their off-season. The beneficiary households have developed their self-esteem and self-confidence through this job scheme. It also mentions the issues faced by the people for not getting employed fully and most of them did not know about the unemployment allowance of the scheme. There were also issues with the implementing agencies not able to choose the right working site. There were no basic facilities for drinking water in many places. The study reveals the issues that the people were facing due to the improper implementation of the program.

The study on the effectiveness of MGNREGA in Maharashtra (Maske, 2015) also states the poor implementation of the scheme across many places. Although the MGNREGA is one of the flagship programs of the government, it still contains many loopholes. The scheme was launched in the villages without proper training at the Gram Panchayat level. It could play a key role in providing alternative livelihood opportunities to the marginal labourers. But the lack of awareness among the people makes them vulnerable to exploitation. There is no awareness about their Job cards, the Jobseeker has the right to keep their job cards with them only. During the study carried out by researchers, it was found that 98% of job seekers are not having job cards with them. There should be proper planning in the implementation of the program. There should be proper meetings organised in the Gram Sabha to discuss the issues at local level to arrive at a solution to implement the MGNREGA in more effective way.

The book "Employment Guarantee Program and Dynamics of Rural Transformations in India" (Pulak Mishra, 2018) states the asset creation of MGNREGA and sustainable agricultural growth in the states of Odisha and West Bengal. It helps us to understand the successful implementation of the MGNREGA scheme which helped the people of the states for getting an alternative livelihood. The average person getting 100 days of employment is more in Odisha as compared to West Bengal. While convergence percentage is more in

West Bengal due to the high efficacy of the Panchayats. Yet there is a huge potential in developing the works related to soil conversion. Land development can increase agricultural yield and commercial plantation will help the people to diversify their occupational structure.

Objectives of the Study

- To study the impact of MGNREGA on the socio-economic status of the villagers
- To identify the problems being faced by them and the village authority in implementing the program.

Brief Description of the Study (Research Design)

In this case, the researchers have tried to use both quantitative and qualitative methods to collect data and analyze it. The primary data has been collected through structured and unstructured interviews with the Village authority¹³ and the residents of the village people. Researcher has tried to analyze it from the perspective of villagers about the effectiveness of this MGNREGA. We have also tried to use data available from the various govt. websites and related articles.

Story Line

Challenge

MGNREGA was started in Khongjal village from the year 2008. The villagers before that were staying at a different place which was quite lower than the present location. Before the MGNREGA, mostly people were involved in agriculture. In the off-season of the year, people had nothing to do. As a result, it was very difficult for them to sustain their livelihood. Apart from that, they were also facing a lot of issues in their village. They did not have access to proper drinking water, sanitation. They were also living in the kutcha house. They decided to shift to a new place to relocate themselves. There they got work under MGNREGA for building houses. In this way their life started transforming. In 2008, there were about 70 job cardholders in the village which has increased to 107 job cardholders in 2019¹⁴.

Below are the details of the number of days of work the people used to get under the scheme:

¹³ Village Authority is a group of 11 members which looks in to the affairs of the village. They are the implementation agencies of MGNREGA and other schemes of the Government. It is headed by a Village Headmen who is the final decision maker and its position is hereditary. All other members are elected by the people of the village. This type of system prevails among the hills of Manipur.

¹⁴ All the information has been mentioned by the group of villagers during an unstructured interview.

Financial year	No. of working days	Wage/day (INR)	Total Income
2011-12	90	126	11340
2012-13	92	144	13248
2013-14	41	153	6273
2014-15	29	175	5075
2015-16	18	190	3420
2016-17	21	197	4137
2017-18	10	204	2040
2018-19	16	209	3344
2019-20	30	219	6570

Table 2: Number of working days under MGNREGA for Khongjal village¹⁵

The assets which were created in the village under MNREGA are mentioned below:

- Footpath within the village
- Retaining wall at Playground
- Construction of retaining wall at Village Court
- Clearance of Weeding and tree plantation
- Perkia Plantation
- Construction of Farm pond
- Construction of retaining wall at Church
- Plantation of various horticulture crops
- Slap Culvert

All these assets that were built in the village have improved the social as well as the economic status of their village. Earlier, before MGNREGA, the average income of the family was merely around INR 2500 per month.¹⁶ After MGNREGA was introduced we can infer that their average household income has increased to INR 3000 per month. Although there is not much

¹⁵ All the information has been taken with respect to discussion with Village Headman and verified also at MGNREGA website.

¹⁶The data has been calculated on the basis of discussions held with a group of people in the village regarding the household income.

significant change if we only consider the income from the MGNREGA scheme. The assets that were built under this scheme bears the fruits from them. Each household is able to generate INR 30000 annually by selling Perkia which they have planted it under MGNREGA. Perkia is also known as bitter beans which have a very good market demand in Manipur. They were able to generate around INR 1000 per month per family from banana plantation. So, we can say that the average income has risen to INR 6500 per month . The plantation of various horticulture crops which is underway would also generate good profit for them. They are also getting benefits from the built farm pond. They were able to store water which is used for watering their crops during summer. Thus there is a substantial rise in their income level after the introduction of the scheme. Socially they have access to farmland, public toilets, farm pond, roads, etc. People gave positive response regarding MGNREGA and were really happy with the work they got from it.

Although MGNREGA had a positive impact on the lives of the people, there has been a lot of issues related to it. The number of days of work under the scheme has gradually decreased in recent years. As a result, they are not getting enough work to do. Surprisingly, when researchers asked about the unemployment allowance for the remaining days, they mentioned that they never

got any such allowance till now. Researchers checked the websites to verify and there also there is no mention of unemployment allowance in each of the records. Most of the people didn't know about such allowance also. We visited the sites of MGNREGA and also observed that the basic facilities like water, the shade was also not present. Regarding the payment of wages, they were not getting the payment on time i.e within a fortnight. They used to receive wages very late at a gap of 40-45 days late.

Response

The village authority requested the Block Development officer regarding the provision of more work under MGNREGA. They also have appealed in the court regarding the provision of unemployment allowance. But there has been no response from the government regarding the provision of employment for more number of days and unemployment allowance for the remaining days.

Action Taken

Till now there has been no action taken by the government to solve the issues faced by the people in the area. The government has to ensure the provision of unemployment allowance if it is not able to provide full employment for 100 days. The people of the village have to be trained properly regarding the provisions of MGNREGA.

Questions for Discussion

1. What other livelihood opportunities can be explored under MGNREGA?
2. What are the special programs to be introduced to educate the villagers regarding the provisions of MGNREGA?
3. What are the loopholes in MGNREGA that should be rectified?
4. How the people of the Ramsophung village in spite of limited resources were able to improve their living?

Lessons Learnt

From the case of Ramsophung we can conclude that even with scarce resources we can build upon our livelihood. Although there has been not much government support in the area, still they utilized the schemes properly which helped them to generate more income. We also learned about the loopholes of such a flagship event where the government is not able to provide what it promises to give through the scheme.

Course Positioning

The case can be used to discuss the pros and cons of the MGNREGA which can be included in the subject Development and Administration Plan. It can also be discussed in Rural livelihood system where we can see how the people had managed to create an asset for themselves which in a way provided them a new source of livelihood. It can be discussed in Managerial Analysis to discuss the reasons behind the failure of the scheme in such areas.

Conclusion

From the study we can conclude that MGNREGA has been a crucial program to improve the livelihood of the people. It has helped the people of village Ramsophung by improving their socio-economic status. It lacks proper implementation and there should be proper plan to plan by the government for increasing its effectiveness. There is need to create mass level awareness about the program, recruitment of competent and sensitive human resources should be part of the implementation process to ensure the realization of desired goals of MGNREGA policy. There should be proper social audit to check the payment are made on time.

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The Study of poor quality of education in village Sanathpur District- Bhadohi, State- Uttar Pradesh

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Introduction to the Village

Education is the most powerful tool in today's world. It is like a passport to the future. It benefits those who invest their time in it. It can beautifully create young minds and can guide them towards the goal of their life. Education paves way for a student's success in life by imparting them with the necessary skills and knowledge and allows them to dream big in life.

India was termed as one of the best countries in terms of education but with times and increasing population, the quality of education in India is getting deteriorated. Right to education is provided in our country as per the articles of the Indian Constitution but there has been a problem of proper implementation of this right. Children get enrolled in the schools but in reality, they are not benefited by the facilities provided to them by the government.

Uttar Pradesh (UP) is the most populated state of India. It has a share of 16.50% in India's population (Census,2011). UP is one of the most backward states in terms of education. The literacy rate of Uttar Pradesh is far behind other states of India. Particularly in the district of Bhadohi where literacy rate is much worse than the state, village Sanathpur has been facing many problems in imparting quality education to its students. Sanathpur is a small village with a large population. 80% of the families in the village have a very low income. Most of the households in the village are dependent on agriculture and own a small patch of land. The produce that they get from land is enough to feed the bellies of their family members. The amount of produce that remains is sold by the farmers to the whole sellers in the market of Block Suriyawan. Muslim community of the village is engaged in the preparation of earthen pots, Bind Community of the village do fishery for living and other households are dependent on small businesses.

As the people of the village Sanathpur do not have enough income, they try to minimize their expenses and spend their income to meet necessities of life. All the children who are six to fourteen years of age are enrolled in classes 1 to 8 respectively in the government school of the village and the education is provided free of cost to the students under article 21A of constitution. But the quality of education suffers a lot due to various problems faced by the students, their parents, and teachers of the school.

Fundamental Action and Research Foundation (FARF) which is currently working for the welfare of the people of District Bhadohi, has made various efforts for improvement of quality of education in the village. It organizes various programs at the school level to encourage children towards education and bring awareness among students about the importance of education in a person's life.

As a part of the curriculum of Rural Management in Xavier School of Rural Management, students are allocated different villages in different states of India. This is done every year to provide experience to the students of diverse rural livelihoods. This is done with the help of the Host Organization (NGO or other organization, engaged in the betterment of rural areas). This experience is known as Rural Living and Learning Experience' (RLLE). The host organization in this particular case study is FARF. This case study will revolve around the working of FARF for improvement in the quality education of students of village Sanathpur.

Identification of the Problem

Problem from the students' point of view:

The government school providing education to the students in the village is having classes from 1st to 8th. As the students belong to those families, which have a

weak financial background. These families can just fulfill the basic needs of the members of their family. So how will they be able to pursue their education after class 8th. So as they see no future for them in studies, they deny coming to school, even if they are enrolled in the school. They also complain that the proper amount of milk is not provided to them under the mid-day meal scheme of the government.

The students also say that the classes for the students from class 1st to 5th and 6th to 8th are held jointly, which leads to the loss of time of those students, who do not have their topic on board. The other students have to sit idle or have to do the same topics again and again. This is due to fewer teachers in the school. One teacher teaches many subjects to the students whether he or she is specialized in that subject or not.

Problem from parents' point of view:

As most of the families in the village are dependent upon agriculture, parents engage their children in agriculture during the time of harvesting. As the parents cannot afford to employ labour in their fields, they engage their children with them to save money. So here poverty acts as a barrier between the education of students and their family's livelihood.

Problem from the teacher's point of view:

Teachers of government schools say that; the attendance of the students is very low. This leads to no understanding of the topics that were held at the times they were absent. Reason for the absence of the students as stated by teachers of the school were:

- They miss classes as they are engaged in agriculture activities along with their parents.
- There are two construction units in the village of Sanathpur. So builders provide the children with Rupees 150 for emptying a truck full of sand or bricks. Often three to four children are required for emptying a truck.
- Some children are engaged in the preparation of food items at various shops in the village.

- Parents support their children to do these types of activities, as these activities are helping them to increase the income of the family.
- The study material provided to the students of the village is sold by them for earning a small amount of money, which further leads to their absence from school.
- Teachers also say that the quality of education suffers due to security reasons as well. The computer or other devices installed in the school are stolen by the villagers. The villagers also use the premises of the school for open defecation which leads to loss of education.

Review of the Literature

(Pandey, 2006) 1. The quality of education suffers when there are two types of teachers, that is contract teachers and permanent teachers. Contract teachers are often termed as Para- Teachers. These teachers are performing the same duties in the same schools but are treated with different government service conditions. On one hand, permanent teachers are paid more on the other hand para teachers are paid less while performing the same duties.

(Harma, 2009) 2. This research says that people prefer well-functioning government schools as compared to low fee private (LFP) schools. As per the survey of 250 households and visits to 26 government and private schools in Uttar Pradesh, whether the low fee private schools are affordable to some parents but still they are unaffordable for low caste and Muslim families. So they still prefer better functioning government schools.

(Singh, 2018) 3. Infrastructure such as availability of electricity, digital learning facilities, sports equipment, sanitation facilities, classrooms, availability of chairs and desks and other important elements like availability of school staff, access to learning material and books directly affect the quality of education. If a single factor is absent then the quality of education will suffer.

(Kaur, Rural education in India, 2019) 4. As per the Annual Status of Education Report (ASER), most of the population of our country still live in villages and the

topic of education is of major importance. As per the reports more than half of the students in class fifth are unable to read a second-grade textbook and are unable to solve a simple mathematical problem. And the reason determined was a single classroom to educate children from first to fifth grade at the same time.

(Jitendra, 2018) 5. As per the reports of the Annual Status of Education Report (ASER) says that the gap between the learning ability of the student studying in government schools and private schools is widening. Students prefer to study in private schools as compared to government schools and choose to pay around Rs. 100 to study there. Even if they are not studying in private schools, they are taking tuitions to clear their basic concepts.

Objectives of the Study

Objectives of the study based on the problem of poor quality of education in the village Sanathpur are:

- To find out various factors that lead to poor quality of education in the government school of the village.
- To find out various activities performed by the Fundamental Action and Research Foundation to improve the quality of education and for less absenteeism of children in the school of the village.
- To find out what major steps are taken by the government to improve the quality of education in the village.
- To find out the changes that have taken place in the education system of the village Sanathpur over the period of time.

Brief Description of the Study (Research Design)

This situation-based case follows a qualitative study methodology. In order to provide the analysis of the data and synthesis of the various perspectives of actors involved in this case, primary data has been collected from the villagers, teachers, and children of village Sanathpur. This has been done by creating a separate group of villagers, teachers, and children and asking them questions related to the poor education structure of the village.

The data collection instrument for this study is the primary data. Based on the understanding of the context and issues a qualitative textual analysis has been presented below.

Story Line

Challenge

The challenge was to improve education quality in village Sanathpur as per the existing circumstances of the people. The challenge was to bring back the students who were enrolled in the school. There was a need to change the mindset of the students towards education and to show them that education is more important for them rather than working at such a small age. There was also a challenge to change the mindset of parents towards the education of their children. There was a need to tell them that the small wage for which they are working might be helpful for them at present but this practice of working at such a small age, when a child is supposed to study is going to affect his or her career drastically. There was also a need to create a better environment of education in schools by creating a good student-teacher relationship.

Response

As the circumstances of education in the village were very poor, the Fundamental Action and Research Foundation took these challenges, organized various activities in the village school for increasing the attendance of the students in the school. The organization went to teachers of the school and each house of the village asking their respective problems. This was done to know various problems related to child education from various perspectives. They came out with different solutions to every problem. As there was a requirement for education after class 8th as well, the organization became a bridge between sponsors and the child who is deprived of secondary level education due to lack of money. Currently, organization is sponsoring the education of 40 children of the village. The Organization also provides regular feedback to the sponsors regarding their sponsored child's education. FARF also supports them by providing them school bags,

school dress, shoes, water bottles for supported children. Every year FARF takes competitive tests to select children from poor families of other villages of district Bhadohi as well to sponsor education of young brilliant minds. On the other hand, the problem related to the absenteeism of children from school due to teaching of common topic to the students, which lead to wastage of time of the students whose topic was not on board was solved. This was done with the help of the District Magistrate (DM) of Bhadohi. FARF reached to DM and told him regarding the problem of availability of fewer teachers that lead to low student-teacher interaction. He helped the school by providing more teachers. This resulted in better student-teacher interaction and relations. This solution also increased the strength of students in school, as different classes were taught separately. The District Magistrate also helped the school with infrastructural changes. He also provided the school with computer equipment for better learning of children and helped in stopping child labour in the village. FARF also organized various programs in the village for parents to let them know the importance of child education.

Action Taken

As a result of the response by the Fundamental Action and Research Foundation and the government official (District Magistrate), there was a massive increase in the number of students coming to school. The students who used to show up for only a Mid-day meal earlier were attending classes in school. With a better student to teacher ratio, education became interesting for everyone and students started attending school regularly. Students in seventh and eighth standards became more competitive as they were taught by teachers specialized in a particular subject.

They were able to understand different subjects more clearly. Those who belong to poor families started appearing for the FARF sponsorship test for education. Parents also started supporting their children's education by not making them work in fields during their school hours.

Questions for Discussion

- As there are many small villages in our country with less number of children in the age group of eight to fourteen years of age. So it is not possible to open a school in the village where the number of students is less. How can we provide education to the children living in those villages?
- There are families in the village with no adult male members. The children of those families are working to earn a small amount so that they can contribute towards the income of their family. How can these children be provided with education?
- There are some permanent teachers (more paid) and non-permanent teachers (less paid) in the village school. Both types of teachers have the same work and burden on them. How does the teacher, who is paid less and is doing the same amount of work will work with the same motivation?

Lessons Learnt

The above case highlights the fact that not only the government or the organizations like Fundamental Action and Research Foundation can bring changes. It is the responsibility and the duty of the parents to guide their children towards the importance of education, so that they can determine their future course of action. There are many changes that are still required for the improvement of education but before that, there is a need for change in the mindset of people. There is a need that people should treat education as a priority for their children before any other thing because education and development go hand in hand. So if the students would be educated they would be able to develop their families in a much better way.

Course Positioning

The problems in the case can be linked to the 'Organizational Behavior. The major problems can be traced back to the attitude of guardians towards the education and motivation of students towards attending schools. The lack of rewards and penalty system is a major driving force for the students. This system does not hold when we talk about the governmental

education system, whereas this holds well in private education institutions. Like prizes for toppers and penalty for short attendance in schools.

This case can also be related to the 'Rural Livelihood System' as education is being compromised on the cost of agriculture. Children do not attend school during the sowing and harvesting season to help their family. This is done so that they can save the cost of labour and can dispose of that income on necessities of life.

This case can also be related to 'Managerial Economics', as during off-season of agriculture children help their families in earning income and are engaged in manual labour. As total expenditure of the family is fixed (which is already very low that it cannot be minimized further) and it is directly proportional total income. And here $\text{Total Income} = \text{Wage} * \text{Total number of working hands in a family}$.

Conclusion

The above-mentioned case tells us that, the problems prevailing at ground level in the village should be immediately addressed to the person or the administration who can solve that particular problem. As in the above case, the problem of poor quality of education was existing for so long in the village, but nobody ever tried to raise this issue in front of any person or body responsible for it or who can solve this problem. There won't be organizations like FARF to help the people of the village every time. People should raise such issues immediately which are of the greatest concern, so that can be solved on time without affecting the life of someone.

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The Study of Livelihood of People in Kanamala Village

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Introduction to the Village

The effects of World War II led all the countries to face poverty and hunger. This was the time when voices started arising for the Independence of India. Even though the Government tried to supply food through ration stores, they were not able to solve the food crisis. During that time, in order to increase food production the then Chief Minister of Kerala Shri T.N John asked the people to invade the forest and cultivate under Kuthakapatta Scheme. The scheme was valid only for three years after which the people have to leave the land. In 1952 the Government again gave them permission to live in the given place and cultivate. That's how most of the places in Kottayam district was formed.

Kanamala also is known to be Pambavalley is a village that comes under Erumeli Panchayath in Kottayam district in the state of Kerala. It shares a border of two districts namely Kottayam and Pathanamthitta. The total population of the village is 998 and the official language here is Malayalam. It has been named Pambavalley as the village is situated on the banks of the river Pamba. The village also has a Tribal community of Mala Arayans who has their tribal language. Kanamala village is also well known for the Light revolution under the leadership of the renowned political leader Late K.M Mani and the 1st rubberized road in India.

Identification of the Problem

The livelihood of the people in Kanamala was mainly dependent on Agriculture but the increasing cost of cultivation and the cost of living pushed the small and marginal farmers to a neglected situation. For aiding these farmers Rubber board, Malanad development society along with NGOs implemented 'Rubber to the poor' project where subsidies routed through NGOs were given to the people who own more

than 10 cents of rubber cultivation. Even though cash crops have a comparatively better short-term advantage

when compared to a non-cash crop there is some amount of instability attached to these crops. Kanamala is a rural remote area where the most cultivated crop is rubber and there is also small-scale pepper and tapioca cultivation because of which the small fluctuation in the market price of rubber will impact the livelihood of these people. The processing of rubber involves various steps which need manual labor and also has an extra expense for chemicals. To bear this expense, the farmers should get enough income by tapping rubber which is not happening. The condition of small scale and marginal farmers are even worse as they sell their rubber sheets through a middleman who also will take a percentage from the amount obtained which also gives an extra expense for the farmer. The current market price per kg rubber varies between 125-150 rupees where the minimum support price by the Government is 150 rupees because of which the Government also has to bear an extra expense to aid these farmers. Even after the aid by the Government the decrease in the price of rubber has impacted the lives of these people. The main problem was that the farmers are not able to bear the overall expense. Even if they find the amount for the overall expense once they sell the sheets the amount is not obtained back, which gives them huge loss and pushes them to debt.

Review of the Literature

The first literature reviewed was a study on the livelihood issues of beneficiaries of the 'Rubber to poor' project of Malanadu development society (Kurien, 2001). The main discussion is on how the Rubber to the poor project has aided the livelihood of the farmers, the role of NGOs in facilitating the process and the methods that were used in order to assess the success of the project. The literature also details why farmers changed from vegetation to cash crop cultivation and how rubber has helped in improving the economic condition of the farmers.

A case study on the declining rubber prices in Kerala

(Shyni, 2016) gives an analysis of the trends in imports and exports, a decrease in the price and the enormous import of synthetic rubber in India. According to the author the decrease in the price of natural rubber is mainly due to the increased import of synthetic rubber. This decreased price mostly affects the small scale farmers where almost 90 percent of farmers in Kerala are Small scale farmers. This situation is observed as the main reason why the livelihood of farmers are affected by declined price. Further author gives suggestions on how the Government has to aid in the situation by the implementation of policies to help the farmers.

Objectives of the Study

The main objective of the study was to understand the livelihood of the people in Kanamala village and how the decrease in the price of rubber has hampered their life. The specific objectives of the study were

- To understand how the decrease in the price of rubber affects the livelihood of the people.
- To study the measures that the Government has taken and its effectiveness.

Brief Description of the Study (Research Design)

The caselet is based on primary and secondary data collection. Secondary data was collected from journals and articles. The collection of primary data through surveys and interviews. 50 households were surveyed out of which rubber cultivators were identified and their livelihood was analyzed. The discussion was also done with these people regarding the issue of SHG meetings.

Story Line

Challenge

The economy of Kanamala village is mainly agrarian and cash crop oriented. The most prominent cash crop cultivated in the village is rubber (Table 1) followed by pepper and cardamom. Kerala's rubber production consumes about 94 percent of the total rubber production in India (Kurien, 2001). The livelihood of the people of Kanamala mainly depends on rubber and the sharp decrease in the price of rubber has impacted their

life miserably. The price of rubber which was 208 rupees per kg in 2011-12 (Shyni, 2016) has decreased to 145 per kg by 2019. The import and export rate have also changed where the import of rubber is higher than the export for the past few years. The main reason behind the decrease in price is due to the availability of synthetic rubber which is cheaper when compared to the natural rubber and also the large-scale import of rubber mainly from Thailand, Indonesia and Vietnam. Even though the production of synthetic rubber has remained the same for past years the consumption of them has increased enormously (Shyni, 2016). The sector also faces other problems such as the impact of climatic change, infrastructural constraints and price volatility.

Response

Almost 90 percent of the rubber cultivators in the village come in a small scale category having less than 2 acres of rubber plantation. An institutional mechanism for forming the Rubber board promotes the development of Natural Rubber under the Rubber Act 1947. The Government announced special schemes to procure rubber from the farmers and make it an asset for the state budget. The Government also requested the Central Government for financial support under the price stabilization scheme. The Government also implemented Rubber Producing societies schemes for providing subsidy for the registered farmers.

Action Taken

The Kerala Government has kept the minimum support price of rubber per kg as rupees 150 to cushion the farmers from price crash. If the local price is lower than this price the difference amount will be given to the farmers by the Government. Even the Rubber Producing scheme failed miserably as only very few farmers registered moreover these farmers were also not getting the subsidy under the scheme.

Questions for Discussion

1. What will be the right strategy by which the people of Kanamala can continue Rubber as their source of income?

2. How can the Government policies help the Rubber farmers?

Lessons Learnt

- Suitable Price Safety mechanism should be implemented for intensifying the safety net for the farmers.
- Participatory Extension Strategy should be formulated for increasing cost reduction and increase in net farm income.
- Cluster formation of tappers can achieve regular availability of employment for them.

Course Positioning

The caselet will be suitable for the course of Rural Development and Rural Management. It will give the learner a thought about how the problems and challenges faced by the villagers or Kanamala can be solved and explore the right strategy to overcome it.

Conclusion

The main reason for the decrease in the price of natural rubber is mainly because of the large-scale import of synthetic Rubber and Natural rubber from other

countries. The current scenario reveals that the import rate in India is much higher than the export. This increased consumption of imported rubber has worsened the condition more. The National policies must be strengthened in order to address the condition of the rubber farmers of Kerala, moreover suitable safety price mechanism and the involvement of the farmers to develop strategies to reduce the expense is necessary for the upliftment of the livelihood of these farmers.

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Annexure

Farmer No.	Rubber	Pepper	Cardamom
1	1 acre	10 cents	-
2	30 cents	-	-
3	40 cents	-	-
4	-	2 cents	-
5	2 acres	-	-
6	2.5 acres	-	-
7	2 acres	-	-
8	3 acres	-	-
9	1 acre	-	-
10	50 cents	-	-

The Study of Bala Badi (pre-school) education in Mandiravalasa, Garividi Mandal

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Introduction to the Village

Mandiravalasa is a village in Garividi Mandal in Vizianagaram District of Andhra Pradesh state, India. According to the 2011 census details, the number of houses was 258, and now it has increased to around 350(as told by the villagers). The local language is Telugu. The village is situated 34km away from the district headquarters Vizianagaram and 3kms away from Garividi.

As per the information from the 2011 census, the total population is 1099. The children's Population is 120, with a literacy rate of 38.4% and the female literacy rate at 14.2%.

Population Data

Census Parameter	Census Data
Total Population	1099
Total No of Houses	258
Female Population%	48.1% (529)
Total Literacy rate%	38.4% (422)
Female Literacy rate	14.2% (156)
Scheduled Tribes Population%	8.1% (89)
Scheduled Caste Population%	3.5% (39)
Working Population%	58.0%
Child(0 -6) Population by 2011	120
Girl Child(0 -6) Population% by 2011	48.3% (58)

The total area of Mandiravalasa is 344 hectares. The prime occupation of the villagers involves themselves in agri-labor and natives having landholdings are into cultivation, and they cultivate paddy, cashew, Jowar depending upon the irrigation sources of the farmer. The village majorly consists of marginal farmers with land holding ranging from 0.5 to 2.5 acres. Most of the lands here are rainfed. The source of drinking water supply is treated water stored in the community overhead tanks and supplied twice a day in the dawn and dusk. The Sodhana

Charitable Trust works on different issues in the village, and currently, it intervenes in health and education aspects focused on children and women in the communities. The trust's head office is in Cheepurapalli, Vizianagaram, which is 4kms away from Mandiravalasa.

Identification of the Problem

Vizianagaram district is one of the backward areas in AP, where the literacy rate is 58.89%, and about 87.3% of the population live under the Below Poverty Line(BPL). There are 3729 Anganwadi Centres(AWC) in Vizianagaram district during 2013-14, but pre-primary education is not carried out effectively in the AWCs. As a result, effective pre-primary education is urgently needed in the region for children. When the Sodhana Charitable Trust partnered with government primary schools to improve the quality of primary school education, they observed the drop-out rate in primary schools was high. Sodhana surveyed and examined the student households of those dropping out of schools and found that school readiness was one of the leading causes of dropouts of children aged 5-10. The other reason they found is that in most of the villages, women worked as agri-labor or non-agri-labor to earn their living, and elder children stopped coming to school so that they take care of the younger ones.

Review of the Literature

For this caselet, few articles and journals were reviewed on Preschool education. The review is done concentrating on the educational scenario in India and other countries. A real framework of education helps a country create a great nation, resulting in long-term sustainable development. Because education is well known to all as a nation's backbone and a sound education system is essential to make it successful. The administration is enhancing the educational status of the nation to improve people's way of life and to achieve different goals such as beating the issue of need and

unemployment, social fairness, wage level, and so on. Instruction adds to the prosperity of the individual and adds to the nation's general advancement. Training is the acceptance or deliberate direction process, particularly at school or college. It is an experience that illuminates. It is generally formally segregated in such pre-school, primary school, optional school, and post-school, university. Preschools give training from ages roughly three to seven, contingent upon the nation when kids enter essential instruction. These otherwise called nursery schools. Essential Education Consist of the first five to seven years of formal, organized instruction. Using songs and dance also creates a positive impact on a child's mind. Music and songs foster the growth of language. Music and language are so intermingled for infants that music awareness is critical to the development of a baby's language and even helps to strengthen the bond between infant and mother.

Objectives of the Study

As pre-primary education is the basis for children for their future formal education, the inputs received from the pre-primary education matters the most. In homes where both the parents are working, they find less time to nurture their child. So, pre-school education acts as an essential facility. The objectives of the study:

- To ensure children are well equipped with the right set of skills.
- To make children lose their fear, develop socializing skills, and make them school ready.
- To ensure the child receives the right amount of nutrition.
- To design activities to increase the physical strength of the children.
- To create a planned learning environment for the child to learn through fun-based activities.

Brief Description of the Study (Research Design)

On my field visit to the village, I had a chance of interacting with the residents of the village, and few of them have shared their life's journey. A woman shared her journey with me of how the pre-schools run by the organization helped her daughter to continue her

studies. The details of the pre-school are gathered from the Sodhana Charitable Trust volunteers and through few unstructured interviews conducted in the village. The Teaching and the support staff working in the Mandiravalasa Bala Badi shared much more valuable information about the curriculum followed in the Bala Badi and how the children of age above four years are assessed half-yearly and annually through assessment tests.

Story Line

Challenge

Satyavathamma, 36, belongs to Mandiravalasa village of Garividi Mandal. Her house is towards one end of the village, where they are staying in a two-room house with a roof above. The house they stayed in was built under the Indiramma illu padaakam. She is a differently-abled child right from her birth, where she comes under the impairment type of disability. She was married to a man; he worked as a construction laborer in Cheepurupalli. In the initial years, they were well off. She gave birth to a boy. Her husband gradually became an alcohol addict and had started to torture her. To overcome the penniless situations, they took loans from moneylenders. She admitted the boy in the Mandiravalasa Anganwadi center(AWC) so that at least he gets some basic pre-school education, and his nutritional levels are maintained. To make ends meet she also started to work in every possible way.

After the formal pre-school education, the boy got admitted into the primary school in the village. The following year, she is blessed with a girl child. She underwent domestic violence because she gave birth to a girl child. The husband abandoned her and the children without informing and left on his pursuit. She was left amid all problems considering her state. She decided to bring up the girl child.

They lived in a house sanctioned under the Indiramma housing scheme and the construction of the houses in the village under the program were taken care by the Sodhana Trust, Which helped them in delivering a quality house to the beneficiaries, that is how more people got

associated with the Sodhana Charitable Trust, Founder, and head, Dr. P.D.K Rao. She was a beneficiary of the Vikalangula Pension scheme, which assured her a certain amount of money every month. Public Distribution System(PDS) also helped her and the children in having the food supplies.

To support the children, she bought vegetables from the wholesale market, became a vegetable peddler, and sold them in and around the village. By this time, the boy was studying in 3rd class, and her daughter was now 2.5 years old. She was worried about the girl since there was no one to take care of her. She made her son drop out of school and take care of his sister. As for that situation, she thought that is the only feasible option for her to continue with her works, and such dropouts relating to different reasons are prevalent in the village.

Response

Observing the increase in the dropout rates in primary schools: The concept of Bala Badi is the brainchild of Dr. P.D.K. Rao, Founder of Sodhana Institution, at Cheepurupalli Mandal, Vizianagaram, Andhra Pradesh. Dr. Rao has completed his Ph.D. from Rutgers University in Nuclear Physics while pursuing his studies in the US; he taught preschool children of mothers in Dartmouth near Harvard, apart from teaching Physics to high-schools students and undergrads in Boston, Rutgers and Middlesex County College. After 11 years of his stay in the USA, he returned to India and chose to serve the society and established the Sodhana Institution in the year 1979. Dr. Rao had recruited teachers who are good in communication skills, creative and have knowledge of songs and dance.

Dr. Rao got inspired by the work of Mr. Ivan Illich, author of 'De Schooling Society.' He sent the recruited teachers to different places such as to 'Neel Bagh' started by David Horsburgh of Rishi valley and to MV Foundation, Hyderabad. So, the newly recruited teachers can know about the children's educational needs and challenges in implementing new strategies. Collating all the experiences and lessons, they prepared the Bala Badi curriculum. The Bala Badis started in the year 2002.

Action Taken

The organization started to survey in the villages to find out the number of children under the age of 5. They also took responses from the people of how they felt regarding the Anganwadi Center (AWC). Many answers are that they were unhappy with the functioning of AWCs. The Bala Badis were started in the huts, and they charge no fee. Parents began to join their children in the Bala Badis. The facilities provided by the pre-school are no less than the AWC. They started offering mid-day meals in the afternoon and biscuits in the evening to the children attending the pre-school. Children are made to come with empty hands, during the first two months, the teachers prepare the newly enrolled students by introducing them to various games and rhymes so, as to make the child feel free in a new environment.

Satyavathamma enrolled her daughter in the Bala Badi (pre-school) in Mandiravalasa with word of mouth from the villagers, and she was also not happy with the performance of her son during his days in the village's AWC. She was now able to find out a way for her son to continue with his education as now her daughter can be sent to the Bala Badi, where she can be taken care of, and her son can be relieved from the responsibility. This enabled Satyavathamma to continue with her works.

Children attend the Bala Badi every day and use the floor and walls, which are painted black, to write numbers, alphabets, and more. Fun based learning is done in the pre-school. Children learn different concepts such as addition, subtraction, spellings, vocabulary, and so on, through activities that involve physical movements. Few of the activities include:

- Chaduvula Kurchi (study chair)- children learn to identify the letters or numbers written on the position they are standing.
- Rail Bandi Ata (Train Game)- Children learn the different names of the cities or places in our state and country.
- Chepte-Rastam (Say-write)- Children learn to write the Alphabet before the picture starts with the same alphabet. And many more.

The teachers genuinely follow empathy towards children. As time passed by, the hut was replaced with a permanent building. Surprisingly, only two children attend the AWC in Mandiravalasa; such efficiency is the intervention made by the institution in the field of pre-school education in the village. Satyavathamma's daughter attended the Bala Badi for two years; then, she enrolled her daughter into primary school. Her daughter is now studying in Kasthuriba Girls Residential high School in a village named G. Agraharam. From a girl being at home, her daughter now teaches her mother how to write and do some basic maths.

Questions for Discussion

- What is the role of government and non-government organizations in transforming people's lives?
- Can the curriculum followed by the Institution be implemented all over the state?
- How well can the inputs received by the children in vernacular language help them in the future?
- What are the areas in which AWCs are lacking?
- Does the privatization of AWCs is a solution?
- How trained and aware are the teachers of AWCs, regarding the issues related to children?

Lessons Learnt

- Few initiatives such as Bala Badis are bringing out the gaps between the deliverables from an AWC.
- A collaboration of efficient NGO's and the Government can bring in progressive changes in the rural areas.
- Playful learning activities can make a child both mentally and physically healthy.
- The play way approach is an excellent method for children in the pre-school, as it helps to improve the child's imagination and talents.
- The initiative could be an excellent opportunity for rural and tribal children to learn their fundamentals and customs in an innovative approach with no financial burden for their families.

Course Positioning

The caselet can be positioned in courses such as Rural Livelihood Systems, and Development Administration

and Policy. As the caselet shows the impacts of different factors on people's livelihoods, the limitations in the capacity of government institutions to function, perform, and deliver, and how education can bring in changes in one's life and to the others associated with them.

Conclusion

Pre-school education defines prior education when they are considered to be primary school readiness. The pre-school as an institution was designed to simulate the physical, mental, social, and emotional growth of the child in ways that could not get into the home environment. It is generally considered appropriate for children between 3 and 5 years of age. In most countries around the world, however, pre-school has become a natural downward extension of the formal education system. Across India too, although not mandatory, the provision of education for children has become almost a standard across urban and semi-urban areas. Much intellectual and social development has already occurred within the boundaries of the interaction of the child's family, peers, and adults. Autonomy thrives as children discover a world beyond their homes and choose from many experiences adapted to their desires and abilities. This allows them to experience many successes other than building trust and self-image.

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Annexures

1. Opinions of parents on Bala Badi(as stated by the villagers)

- “The Balabadi has not only helped in the education of my child, but it has also disciplined my life.” -Krishnaveni (Mother of Teja)
- “I do not have to force my child to school in the morning. My son forces me to get him ready for school.” - Varalakshmi (Mother of Pavithra)
- “We cannot provide education to our kids in private schools. Free education is helping us to a large extent.” - Naidu (Father of Ramu)
- “I am also a Balabadii teacher in a nearby village. I need to stay there till late afternoon. But I do not worry as the Balabadi in our village takes care of my child” -Mohan (Father of Praveen)
- “The monthly health camps organized here solves the health-related issues of my entire family ” -K.Appa Rao (Villager)

2. List of Students studying in the Bala Badi- Mandiravalasa (Source: School Register)

Sl.No	Name	Age	Gender	Category
1	G Delishwara Rao	4 years	Male	BC-B
2	B Teja Kiran	5 years	Male	BC-D
3	G Bhuwaneshwari	4 years	Female	BC-D
4	M Jashwanth	4 years	Male	BC-D
5	L Yamini	3 years	Female	BC-D
6	V Tulasi	4 years	Female	BC-D
7	P Rutesh	4 years	Male	BC-D
8	P Govindha Raju	3 years	Male	ST
9	P Dinesh Teja	5 years	Male	BC-D
10	P Pavithra	4 years	Female	BC-D
11	M Purnima	3 years	Female	BC-D
12	G Janikiram	4 years	Male	BC-D

13	T Lucky	4 years	Male	ST
14	M Vaishnavi	3 years	Female	BC-D
15	M Praveen	3 years	Male	BC-D
16	M Neeraja	4 years	Female	BC-D
17	L Sonia	4 years	Female	BC-D
18	T Riyansika	3 years	Female	BC-D
19	G Lakshmana	3 years	Male	BC-D
20	G Ramu	3 years	Male	BC-D
21	P Yethendra Naidu	2 years	Male	BC-D
22	P Chandini	3 years	Female	BC-D
23	G yashaswi	3 years	Female	BC-D
24	G Yashaswini	3 years	Female	BC-D
25	V Mohanarao	2 years	Male	BC-D
26	G Danush	3 years	Male	BC-D
27	M Deepika	3 years	Female	BC-D
28	G Uma Mahesh	3 years	Male	BC-D
29	S Manojini	4 years	Female	BC-D
30	M Purnasandhu	3 years	Male	BC-D
31	G Lasya Sri	3 years	Female	BC-D

3. Photos of the Bala Badi in Mandiravalasa, the teacher and children in an activity.



Toda - Looming Water Crisis

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Introduction

'Toda' is a small village which consists of five hundred households (Census 2011) and is situated seven kilometres away from Laxmangarh in Alwar District of Rajasthan. The village comprises of people who speak 'Haryanvi' as the primary language. Apart from Hariyanvi people can understand 'Hindi' as well. The primary source of income or livelihood of the people of Toda is mainly agriculture and other small business like owning small shops. The area where Toda is situated comprises of fertile soil which is very uncommon in Rajasthan. Since Alwar is situated in the bordering area of Rajasthan and shares its boundary with Haryana, one would find the region to be semi arid but also at the same time fertile enough to sustain two types of crop cultivation. Total population of Toda stands at three thousand (Census 2011) and total literacy rate of the village is at fifty four percent. One of the most interesting things that can be observed at Toda is that there is communal harmony to such an extent that differentiation between Hindus and Muslims are very difficult to identify. The Muslims of this area are known as Meo-Muslims. Their culture and living style is interwoven to such an extent that hardly one could find the difference in between the two cultures. In terms of development, the village has very handful of Kutch houses, the number standing at around thirty households. These households happen to be the household of people who hardly have any share of land for agriculture or farming. These people mainly work as agricultural labour in other fields. Apart from that the village has access to electricity and Pucca house with closed personal Toilets in every house.

Identification of problem:

During our stay in the village we encountered two big issues in the village, they being water and electricity. The village has access to electricity but the availability of electricity in the village is for ten to twelve hours only. The major problem that the people of this region face is

with availability of water. Since the village falls in the zone where cultivation of at least two crops are possible, lack of water for irrigation makes it difficult for them to sustain. Chetram is a farmer who owns around four 'Bigha' of land in Toda (2.5 acre in terms of standard in Rajasthan). Chetram has divided his land into two parts where he grows 'Gehun' (Wheat) in one section mainly on one and a half acre of the land and the remaining one acre he uses for cultivation of 'Sarso' (Mustard). Here Mustard happens to be the cash crop for people like Chetram. On doing survey it was found that people who are into cultivation here follow the same pattern of cropping and land distribution for cultivation. They divide the land in two parts where in the major portion they grow Wheat and in the minor portion they grow mustard or 'Bajra'. Chetram happens to face the same problem which other farmers in the villages are facing. The problem of water for irrigation happens to be the major cause of sorrow and hardship for people like Chetram. Along with irrigation there happens to be certain number of households in the village who are also facing issues with drinking water. The ground water level for certain households has gone down to such an extent that they have to rely on community water resource like bore well and hand pumps.

Literature Review

Water conservation technique happens to be the most important aspect of rural life in arid regions such as Rajasthan. For the people dwelling in the rural areas of Rajasthan, water conservation technique happens to be interwoven or knit closely with their culture (Saxena, 2017). One of the main sources of water in rural areas is 'Toba'. It is a depression with a natural catchment area (Saxena, 2017). Toda happen to be constructed around those areas only where a natural catchment area for the water could be found. For example a Toba could be constructed at a place even where there is no availability of depression but a natural catchment area is present. In

such cases the depression is artificially made and the catchment area serves the purpose for feeding the water body. Around this *Toba* green pasture grows which is utilized by the people for feeding the livestock. This happens to be the grass to water conservation system which is traditional to the villages of these areas. The green pasture is well utilized by the farmers for rearing the livestock. For increasing the water conservation of a *toba* the catchment area is widened regularly and the *toba* is deepened at the center to avoid or minimize the water loss by evaporation (Saxena, 2017). Along with *Toba* another form of water preservation is '*Kunds*'. This technique of water conservation is more prevalent in areas where surface water availability is very low and ground water has salinity variation from moderate to high. This form of water conservation is more common in western part of Rajasthan. '*Kund*' is a type of water conservation system where water from the catchment area is collected and conserved in a separate tank and then it is made to flow slowly into an open reservoir from where people can collect water as required. *Kunds* help in clearing out the salinity of the water available and at the same time provide sweet water for drinking purpose. Areas like Barmer where groundwater has a total dissolved solid of 1500-10000 ppm, *Kunds* are a very useful alternate to sweet water (Dhruv Saxena, Pg. 97, Water Conservation: Traditional Rainwater Harvesting Systems in Rajasthan October 2017). The catchment area of the *Kunds* are cleaned properly every year before the onset of the rainy season, even though the rain happens to be of very low level still the water collection through catchment area is more than enough to fill up the *Kund*. The water from the catchment area flows into the tank where meshed wires are set up to avoid any kind of debris or reptiles or sediments to get into the tank (Saxena, 2017) Water from the tank is pulled out using pulley mechanism by the people. It is to be noted that the water from *Kunds* are to be used for drinking purpose mainly as the water available here is sweet and clean water. By use of the mesh wire and keeping debris and other wastes out of the *Kund*, water borne diseases are also avoided. The catchment area for the *Kunds* is saucer shaped with the slope towards the center being gentle downhill for the water to flow smoothly to the centre. At

the centre there happens to be the Tank where water is collected for consumption¹⁷.

Another aspect of water conservation that is used by the local people is '*Kui and Dakeiyam*'. This is one of the oldest techniques of water conservation where a *kui* is made near the well or water collection tank to collect seepage of water. It is done mainly to avoid or minimize the water loss through seepage. *Kuis* are mainly dug 10-12 meter deep by the side of the tanks (Saxena, 2017). Similarly *Dakeiyam* is another technique used by the local people to collect water but it is mainly used for emergency need of water. '*Dakeiyam*' are shallow wells dug in farming lands where they are utilized by collecting rainwater. The water conserved are mainly used for cultivation purposes (Saxena, 2017). The water which is used to harness the crop also seeps into the well and the water is then used for emergency purposes.

Objectives of the Study

The major objective of this study is to:

Observe and analyse the problem people of rural Rajasthan faces and the traditional technique they adopt to conserve water in such harsh conditions.

This study is done in a village named *Toda* situated in Alwar district of Rajasthan. The water crisis persists in the area but it is not that acute with respect to the western Rajasthan area. The soil of this area is fertile enough to sustain cultivation and good harvest. But the scarcity of water makes it difficult for the people to support their harvest and also obtain water for drinking and other purposes. The study is to understand why the people of Alwar try to rely on the government intervention rather than developing cohesive alternate sustainable mode of water management and conservation.

To understand how alternative independent methods of water conservation can be adopted without the intervention from the government's side.

Water available here for drinking purposes is from

¹⁷ Photograph of *Kund* attached as Annexure

groundwater only. The same water is used for drinking as well as for cooking and cattle feed. The family members of this place practice an old tradition of collecting the water they use for bathing. The water they use for bathing is collected in vessel post cleaning and washing, and this water is used for cattle feed. This technique is also used in villages of western Rajasthan especially Jaisalmer (Saxena, 2017). Hence this study is done to identify the problem along with solutions regarding water conservation in arid regions such as Alwar, Rajasthan.

Brief Description of Study Undertaken

1. Type of data collected: Survey Questions Structured in nature was set up in advance to be asked to the villagers. Along with this the process Snowballing was also used as an informal mode of information gathering from the villagers. The Survey was done with one member (mainly the head of the household) per family and total household covered were fifty in the village. Along with this eight other households were covered in the process of snowballing for information gathering.
2. Sample Size: Total of fifty houses were covered through Survey and other eight households were covered through Snowballing process.
3. Process of Study: The entire study was done through Primary research and tools used here were Surveys and Observation.

Storyline

Challenges

Farmers like Chetram face the issue of water crisis every year. This happens to be a recurring issue for people like Chetram. Irrigation problem coupled with the unavailability of drinking water has remained a major problem for the villagers of Toda. People shifted to bore well for availability of water for consumption but it only took a few years for the ground water table to fall even lower and the majority of the households in the village ran out of water for consumption due to excessive use of bore well. One thing became quite clear that the

groundwater table was unsuitable for over exploitation.

Response

People initially started going for borewell for consumption of water, but since over exploitation occurred the ground water table fell below the level of the bore well. People started to device out the old traditional methods of water conservation. They turned towards the traditional methods of water conservation for drinking water purpose. Since the water of the groundwater table is more brackish in nature the technique of '*Kund*' was adopted. There happen to be three Kunds in the area near Toda. Originally the areas served as a tourist spot and the water was mainly used for cleaning purpose and cattle or livestock feeding, but with the crisis of water looming two out of the three kunds were converted and segregated for drinking purpose. The third Kund is still being used for cattle feed. Water from the Kund is carried to the village by the women folk mainly and that water is used judiciously for cooking, drinking and other cleaning purposes. But the problem of irrigation still persisted here.

Action Taken

The Government decided to step in to resolve the crisis of water for irrigation as well as drinking. Since the villagers were able to identify a solution to the drinking water problem, Government decided to focus mainly on irrigation problems. Targeting the irrigation problem would not only solve the cultivation issue that farmers of the region were facing but also would solidify their livelihood and create a protective cover around their cultivation and agricultural allied activities. Hence the Government decided to build a boring pump in the outskirts of the village especially for the purpose of irrigation. Water from the pump was to be let out to the farming land nearby at a rate of hundred and fifty rupee per hour. This gave respite to the farmers as wheat and mustard cultivation could easily be supported by the amount of water the government was making available to the farmers. Along with this a certain amount of water every morning was let out for the purpose of drinking also where women folks from every household came with their carrying containers to get water for the household

purpose. This also resolved the problem of travelling to the nearby Kund on foot and carrying the water back to the village.

Hence the government carried a two prong solution to the issue. Not only the irrigation problem was solved on a larger basis but also the drinking water crisis was also solved. This kind of solution cannot be said to be a permanent solution but at least for the time being it gave respite to the people of the area regarding drinking and irrigation water.

Questions for Discussion

On observing and analysing the day to day problems of the people of this village certain question arises:

- Should Water conservation and water management be taught to students at a higher level of education as a compulsory part?
- How can the traditional methods of water conservation be promoted and preserved among the people of such a water deficit region?
- What should be the modern day technology that could be used to conserve and manage water?
- How to avoid water borne diseases in arid and semi arid regions?
- Plantation and vegetation should be promoted to allow more precipitation and climate control in arid regions. (Saxena, 2017)

Lessons Learnt

The major lesson learnt in this particular case is that people can survive in any given condition with the help of traditional knowledge and their survival instincts. In a place which is as dry as a desert, traditional knowledge of water conservation has helped people sustain and carry forward their life. Along with this intervention from the government's side also provided relief and a proper policy regarding such issues concerning basic need to sustain life can easily and effectively implemented. Today, the issue of irrigation is not a big problem anymore. With diversification of income in most households, people are able to afford the cost of irrigation of their field and the government has been

successful in achieving a sustainable solution to the problem. The government itself had also created and erected water tanks on road ways and common areas for emergency need of water (mainly for consumption).

Course Positioning

The caselet should be used to teach:

- Development and Administrative Policy (DAP).
- Along with this it should be used in Micro planning (MPP).
- Development Program Management (DPM).
- Community Mobilisation and Institution.

Conclusion

Even though having a very difficult life due to lack of access to water, people are happy and satisfied in their lives. The solution to the basic problems is that people in the village are more concerned towards higher order of problem. Every household belonging in this village owns some amount of land for cultivation. What was observed was that in case of land holdings, unless the land which these people owned were more than six 'bigha' agriculture was not the primary source of income as it used to be. Hence the entire community of the village have diversified their mode of income from agriculture to small business because of this issue. They are more concerned about the education of their children now and are more into getting government jobs than continuing the profession of agriculture. The village as a whole is self sufficient in terms of producing through agriculture and with the water crisis having been solved temporarily the prospect of farming is better in terms of cultivation.

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Photo



Kund found in certain regions of Alwar, Rajasthan. (Picture collected during stay in Village)

The Study of Girl Education in the Village Kandarwasa

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Introduction to the Village/District

Kandarwasa is a village situated in Ratlam Block of Ratlam district in Madhya Pradesh. Kandarwasa is in the rural part of Ratlam district of Madhya Pradesh, it is one among the 170 villages of Ratlam Block of Ratlam district. People are living in a very peaceful manner. This village has a very proud history and agriculture is the main profession of this village. Kandarwasa is the gram panchayat of Kandarwasa village. The total geographical area of the village is 625.81 hectares. Kandarwasa village has a population of 2090 of which 1044 are males while 1046 are females as per Population Census 2011. There are about 461 houses in Kandarwasa village. Ratlam is the nearest town to Kandarwasa which is approximately 22km away.

Identification of the Problem

In this village Kandarwasa, the girl child was not sent to school for education till the 1950's due to various reasons. These reasons lead to the exploitation of girl children and it also restricts their girl child to be empowered. Due to lack of education, girl child also develops a sense of inferiority as compared to educated children.

Review of the Literature

Education for women goes beyond going to school. It also involves ensuring that girls learn and feel safe while at school and complete at all levels of education with the skills. Learning the socio-emotional and various skills needed to navigate in the dynamic world. Making decisions about their own lives, and contributing to their communities and nation.

Education for girls is a priority for strategic growth. Better educated women tend to be healthier, engage more in the formal profession, earn higher incomes, have fewer children, get married at a later age, and

provide their children with better health care and education if they choose to become mothers. Combined, all these variables will help lift families, societies, and nations out of poverty.

According to UNESCO figures, 130 million girls between the ages of 6 and 17 are out of school, and half of them in sub-Saharan Africa will never reach a classroom with 15 million girls of primary school age. Female education is a catch-all word for a complex set of girls and women's education issues and debates. This covers areas of gender equality and access to education, as well as its contribution to poverty. The separation of education along gender lines as well as religious education teachings has historically been influential and is still highly relevant to current discussions of educating women as a global consideration.

Objectives of the Study

To find out what are the forces which drive or promote the girl education in village Kandarwasa.

Brief Description of the Study (Research Design)

The case is prepared by using a structured personal interview.

Story Line

Challenges

- In this village Kandarwasa the girl child was not sent to school for education till 1950 due to various stereotypes and reasons prevails at that time:
- The people thought they are only meant for household activity,
- If they send their daughter to school, they fear that they will indulge in some affair which will reduce dignity in society,

- What benefit would they add to their family as she has to marry someone one day,
- Girls often stay in their home to take care of younger siblings and bear the main burden of housework,
- Most parents were unwilling to allow their daughters to walk long distances as schools were not available in village Kandarwasa,
- Too often marriage is seen as a higher priority than education. The low value attached to girls' schooling means few other options are available to them,
- The school was not available in the village and a girl has to travel for a long distance,
- Parents could not send their daughters to school because of poverty,
- Child marriage was prevalent at that time.

Thus, by not sending their girl child for education because of various stereotypes and reasons leads to the exploitation of girls and develops a sense of inferiority. Those women might have a chance of a healthier and happier life could be a reason enough for promoting girls' education. However, there are also important benefits to society as a whole. An educated woman has the skill, information, and self-confidence that she needs to be a better parent, worker, and citizen.

Response

This village was facing a lot of problems in the 1950's related to girl child education, no one wanted to send their daughter to school for various stereotypes and reasons prevailed in the society at that time. Then a reputed family from the village came forward and started to send their daughters in schools. In 1950 schools were not in the village. If anyone was willing to educate their child, then they have to send their child to nearby cities which are Namli or Ratlam.

The royal family of this village was the first family to send their daughter to school. Two brothers of this family sent their daughters to school in Ratlam and Namli. The name of those brothers was Mr. Ishwar Singh (refer picture- 1) and Mr. Govind Singh. Mr. Ishwar Singh and Mr. Govind Singh were first in the village who initially sent their

daughters in school for studies. Mr. Ishwar Singh and Mr. Govind Singh belong to the Royal family of village Kandarwasa. Mr. Ishwar Singh was the *Thakur*/King of the village. He sent his daughter Ms. Jaswant Kuwar to study till the primary level which is till 5th class in Namli, now she is married and lives in the Shikhrani village of Rajasthan which is near Ajmer. Mr. Govind Singh is the younger brother of Mr. Ishwar Singh and he also sent his daughter Ms. Krishna Kuwar to study till 10th class at Ratlam. Now she is married and lives in the Pratapgarh town of Rajasthan.

Action Taken

This family of Mr. Ishwar Singh and Mr. Govind Singh acts as the role models in the village and everybody in the village respects them. By seeing them sending their daughters for education to other places outside the village, develops a sense of confidence in other parents in the village to send their daughter to schools. This royal family also motivated the people to send their daughter to school. By sending their daughter to school outside of village which is in Namli or Ratlam the royal family of village Kandarwasa helped to create the confidence in other people of the village and broke all the stereotypes which exist in the village and set up a foundation stone in village related to girl education.

After following the royal family of Kandarwasa many people in the village started sending their daughters to school, which also lead to an increase in the admission of girl children in various schools near Kandarwasa. This increasing interest of children to go to school from this village Kandarwasa creates the need for the development of the school in the village. In 1942 the village had its primary school and in 1980 the village successfully established its high school with the help of the Government of India.

But now the village has two primary schools (refer picture- 2) and one high school (refer picture- 3) in which all the kids of the village are studying. Many private school buses (refer to picture- 4) also started coming to the village to take students for school. The female literacy rate has also increased over the previous year in the village of Kandarwasa. According to Mr. Bhagwan

Singh Pawar who is the teacher and manages the primary school in village Kandarwasa says that "all the children in this village Kandarwasa are now getting the primary education and no children are left without education in this village Kandarwasa". According to the census of India in 1981 the female literacy rate in Madhya Pradesh was 16% which has increased to 60% in 2011.

These all things related to the education of the girl child are now looking possible and simple in 2019 by simple steps taken in the year 1950 by the royal family of Kandarwasa which set up the foundation stone for girl education in this village Kandarwasa.

Questions for Discussion

The various questions which arise for discussion:

1. Will setting an example in society can always lead to a positive outcome?
2. What are other different ways by which we can attract the whole community to participate in a common cause?

Lessons Learnt

In some societies, we need to set an example that all people in the society can follow. While setting up some examples in society will give other people a sense of confidence and courage to perform tasks that will help in the upliftment of the whole community. If we initiate a process and we succeed then others will follow and take that objective to greater heights.

Course Positioning

The case can be linked to managerial analysis as it show how we can develop society by setting an example that will lead to the optimum development of society. The same can be used in an organization to ensure the growth of an organisation by setting some examples.

Conclusion

The process which is initiated by the royal family of village Kandarwasa of educating first girl children from their village has fixed the foundation in the village which helps in promoting the girl education for decades. Through this initiative taken by this royal family in village Kandarwasa, the new generation is having benefit as now all the children in the village are going to school. However, there are also important benefits to society as a whole. As an educated woman has the skills, information, and self-confidence that she needs to be a better parent, worker, and citizen.

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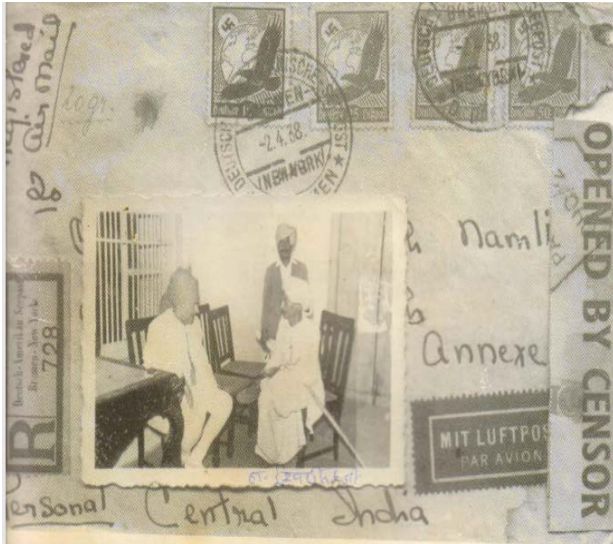
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Photos



Mr. Ishwar Singh sitting on the right chair



Primary school located in Kandarwasa



High school located in village Kandarwasa



Private school bus in the village of Kandarwasa for private school students

Rural Folk Tradition

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Introduction to the Village

Hazrabari, a small micro level village includes roughly 100 family units. The town falls under Pandua panchayat in the Malda district, West Bengal and is around 4 km from Eklakhi junction, which is the closest railway station. It is an agrarian-based village. The most visited primary health center is the "Hatimari ", which is about 2km from the village. The village has an elementary school, "Kalidighi Prathamik Vidyalaya" where children from nursery to class fifth go, yet the vast majority of the family units in the village send their wards to "Hatimari elementary school" since they know the nature of education given there is better as compared to the other options. For advanced education, students go either to "chitkole secondary school" or "hatimari secondary school", yet the most preferred one is the chitkole secondary school as it is closer to the village. For school, children need to go to Malda school or Gazole school. According to my perception, no understudies have examined more than class tenth, after that the young ladies are offered and the young men used to go out to win living for the house. The closest petrol pump and the bank are arranged at Aalampur which is around 5 km from the town. The street availability to the town is great, there is a pucca street interfacing the town to the nearby haat. For transportation, individuals need to take an offer auto or trekker (jeep) which is, for the most part, packed because of the absence of transport accessibility. The village is dispersed, there are mango plantations and paddy fields in the middle of the village families, which makes an issue in associating the entire village. Practically every one of them has Kutcha houses except for a few who have pucca houses. There are a few family units whose pucca house is under development, under the "Pradhan Mantri Awas Yojana". There is finished zap in the village. For drinking water purposes, they utilize the submersible siphon which is either settled by the government or the community for bathing and washing utensils, clothes, etc. the residents still utilize the lakes accessible to the village. The literacy rate of both the males and females of the village is low. Since

the village is so small, none of these data are even available in the census of 2011.

Identification of the Problem

The vast majority of the farmers was landless, depended intensely on horticulture as they basically earned their livelihood as rural workers since the greater part of them were unskilled, had a place with below poverty line classification who consistently felt disregarded because of their social stature having a place with social standings. They already possessed the unique ability of singing in native Rajbanshi language, but they never believed in themselves that they would be capable of presenting their local music in front of people , help spreading the general awareness through their performances and lastly, this would further let them sustain their ancestral local language in the outside world.

Review of the Literature

I went over two research journals and an online article that back up the case I have carefully recorded. From the sources, I could deduce that in the course of the most recent couple of years, astounding development of a few private companies engaged with the creation and spread of neighbourhood music has brought about expanded access to and thankfulness for local music. Later on, there is an extent of building new stages expanding artist's entrance to rising worth chains. These tunes could be gathered and adjusted into monetarily suitable music and showcased on sound tapes. This would likewise decide the effort of community music to the outside world and it would enable the individuals to envision what their expertise intends to the outside world and the amount it is esteemed. Folk music is a significant factor which would feature the statement of culture and character of the little country regions/villages equipped for sustaining the craving for new encounters related with the past requested by "rural" sightseers, which thus could help lift the status of

these ignored zones. Further, traditional music (story, beat, song, instruments and movement) would empower the individuals to comprehend the country culture of the past and the transformation handled over them by time. This was genuine not just for those "new entertainers" of the provincial world yet in addition to the travellers and their rediscovery of rustic culture, as visitors and the travel industry exercises were getting progressively present in country reality, portraying the move towards multi-usefulness of the countryside.

Objectives of the Study

- To promote rural folk music and short skits.
- To provide an alternate source of sustainable livelihood.
- To motivate for community development.
- To make more participation and cooperation for the community development.

Brief Description of the Study (Research Design)

This caselet is based entirely on the primary data that I collected from 50 families using structured survey questions and informal interactions which gave me an insight about the lifestyle and hardships faced by the villagers. My reporting officer Mr. Shibesh Das also shared his view about how he helped the marginalised people of Hazrabari through his intensive involvement in community development approach. Lastly, I also referred to a subject which I studied in my first trimester, that is, Managerial Analysis which helped me systematically put the case.

Story Line

Challenge

The hesitance appeared by the individuals to adjust to new intercessions that would assist them with improving their present status of employment. The reluctance of individuals to step up and plan something to increase their living expectations, that is, being happy with the sort of work they have been doing over the ages.

Response

Kokil, a residence of Santhal town was a fakeer (holy person) who sang Baul songs in the local Rajbanshi language. He had a wonderful voice that could mesmerize the group of spectators since he sang flawlessly. He chanted the local music at any place wherever he got a chance to show his concealed ability in order to acquire his living (alms). He was outstanding by Mr. Shibesh Das, who was the organizer of the Rajagidhi Community Health Service Society (RCHSS), which was a non-profit organization that served more than one million neighborhood network individuals from two districts of West Bengal. Among the different ethnic gatherings, the association worked with around 150,000 tribal people and 320,000 Indo-Mongols, including most of the oppressed, minimized agrarian families. On one fine day, Kokil had the opportunity to communicate with Mr. Das and discovered that he used to welcome individuals from Cooch Behar to perform Bhawaiya with would be a wellspring of diversion for neighborhood locals with the shrouded motivation of spreading mindfulness through their show. Bhawaiya was an acclaimed type of folk music existing in the North Dinajpur district of West Bengal. In the wake of tuning in to him, Kokil told Mr. Das about his sister, Gunowala who was living in Hazrabari, who since her childhood sang kirtan in her melodious voice. Surprisingly, Mr. Das recalled while executing a development initiative in Hazrabari where the organisation was giving natural seeds (vegetables and organic products), plants, garments, and so forth to the locals for elevating their status in the community, at the same time, he framed five self-help groups (SHGs). The villagers had confidence in the organisation as they were really working hard for them, making functional possible results for the individuals to participate in fundamental organizing and essential initiative at the grassroots level, helping them increase their gainfulness and making them aware about the distinctive government schemes like MNREGA and other agricultural plans through leaflets, pamphlets and training modules which would benefit them. Gunowala was one of the individuals from these SHGs which existed in the village. Keeping these things, Mr. Das thought of a special thought which would empower the association in giving the villagers a supportable model that was based on solidarity and co-

ordination rising above social and correspondence fringes to address the need of the community.

Action Plan

Mr. Das' idea was to strengthen the existing community-based organizations and build more local groups/institutions to enhance social mobilization. His primary focus was on livelihood security for which he came up with an idea to create a group of 12-15 people with the help of already existing self-help groups (SHGs). Instead of inviting people from Cooch Behar, he could help these villagers to take a stand for themselves and use their unique potentials to demonstrate their ability in front of the fellow villagers of the nearby town, with the sole intention of spreading awareness. Keeping all these factors in mind, Mr. Das provided the villagers with instruments like harmonium, tabla, dhol etc. apart from providing the basic instruments, he committed to give Rs 1000 per person who was a part of the group which was formed for addressing his vision. The villagers reciprocated positively towards the initiative and started practicing extensively every evening once they completed their fieldwork and sometimes came to the centre and rehearsed in front of Mr. Das, who guided them according to his preconceived knowledge about traditional music and gave suggestions accordingly. With time, the members of the groups coordinated with each other and worked on improving their performances (songs and skits). They used to perform on local occasions like if there was any festival being celebrated, marriage ceremonies, birthdays, rituals, divine worship etc. and for the centre for which the group was primarily formed which in turn was very pleasing for all the villagers. Gradually, the group started to gain confidence and began to participate in district level competition (Raiganj Bhawaiyan competition), where they started to compose their music depending on the type of song the situation demanded, which was mainly divided into two categories- *Duria* (sad song) and *Chatke* (happy song). Doing so, the villagers were able to showcase their work and rajbanshi language which was the local language sustained through their production and started gaining popularity. To see the group prosper, Mr. Das was very happy. Since the NGO was doing exceptional work for the marginalised communities in Malda district, the

organization got the governmental support for their project initiatives and was able to build a good rapport with the government of West Bengal. Surprisingly, one day Mr. Das came across some vacancies for artists in the department of Information and Cultural Affairs, West Bengal. Afterward, he approached Mr. Ranjit Chakraborty who was heading the Lok Sanskriti office, Malda who was responsible for the recruitment of these artisans and requested him to witness their performance once. Impressed by their show, the villagers got an opportunity to perform for West Bengal's cultural programs which were usually held 4-5 times in a year for which the group used to receive a sum of Rs10000-Rs15000 per show. Further, the government also sanctioned the villagers' government identity cards which gave the people a new status in the outside world. The group was now countrywide famous, as a result of which their songs were demanded by the film directors since they were that good and consequently, the performance of the group was recorded and uploaded on YouTube by BNC production which added to their fame.

Questions for Discussion

1. What problems may arise in replicating the Hazrabari model in other villages?
2. What are the ways to entrust support from the villagers?
3. How do we empower or create awareness among the villagers?
4. Should the development objectives focus on short term goals or long-haul targets?

Lessons Learnt

The development of co-operatives is a decent method for sorting out marginalized workers as they discover financial and moral help through the organisation. The accomplishment of development objectives is driven by an intermingling of objectives and vision of leadership notwithstanding money/infrastructural support from the NGO or government.

Course Positioning

The caselet will be reasonable to be included in Rural management and development courses where subjects like Social Research Methods , Development Administration & Policy, Rural Livelihood System, Community Mobilization & Institution Building and Managerial Analysis can be understood with a more practical approach, that is, through active participation and two-way interaction. It will give the students an idea of how the issues and difficulties happen for forming sustainable model in rustic business.

Conclusion

Rural Development implies in overall advancement of rural areas social, economic, political and cultural aspects with the goal that individuals can have a wonderful existence. On the off chance that these sorts of mediations are made anyplace the nation over, the resultant correspondence and advancement fortify and bolster each other taking the nation forward. Further, it tends to be concluded that the role of traditional folk media on rural advancement is still viable, that customary channels of correspondence, for example, drums, melodies, village crier and folktales are still a compelling method for imparting development programs. Finally, messages can be bundled and displayed as execution.

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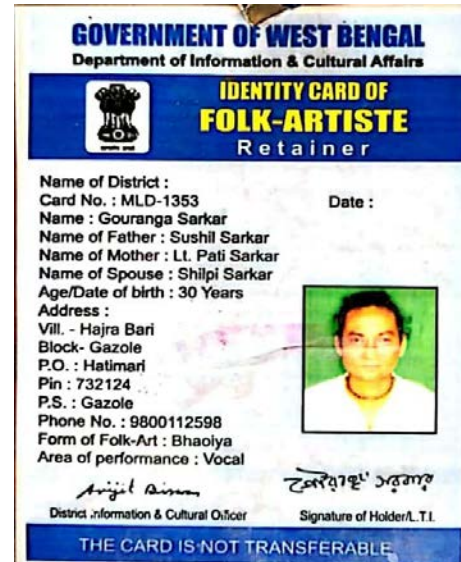
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Photos



Dabhad Naadi, A Case from Ed Sindhari Village, Barmer, Rajasthan

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Introduction to the Village

Ed Sindhari is a revenue village in Sindhari block of Barmer, a district of Rajasthan. Barmer district is situated in the western part of Rajasthan and is a part of the Thar Desert. The nearest district to it is Jaisalmer. Ed Sindhari is one of the nearest villages from the block. Balotra is the nearest city to Sindhari block. The village has a population of 1734 out of which 914 are male and 820 are female¹⁸. Majority of the population speaks Marwari¹⁹. Primary occupation of people in the village is doing agriculture. One of the major problems of this village is lack of irrigation facilities. So people depend on rainfall for agriculture (usually kharif season crops). People of this village depend on *Tankas*²⁰ for daily water usage like drinking, cooking and toilet. They prefer using the water from tube well for bathing (*garam pani*²¹). The major income of the families in this village is from masonry and casual labour through seasonal migration. Along with it they sell *moong*, *moat* and seeds of *matira* (kind of wild watermelon). Apart from it people here rear livestock like cows, buffaloes, goats and sheeps. As mentioned above the region being a part of Thar desert is arid without greenery. But it can be balanced with the scenic beauties like beautiful sand hills and long sand fields elongated till the horizon and of course the camels.

Identification of the Problem

The scarcity of water and lack of alternate water resources.

¹⁸ Data accessed from Census Report 2011 <<https://www.census2011.co.in/data/village/87924-ed-sindhari-rajasthan.html>> dated 2nd December 2019.

¹⁹ A Rajasthani language.

²⁰ Tanka is a covered cemented underground water tank. These are either refilled by water tanker or rainwater.

²¹ Hot water in hindi.

Review of the Literature

Rajasthan is dealing with scarcity of water from a very long time but the scenario is getting worse with time. With the decrease in rainfall year after year, the problem of getting clean drinking water is increasing. And the people belonging to the rural part suffer more difficulty in getting clean drinking water for themselves. The ground water in Rajasthan is salty and people generally don't use it for drinking. People also depend on the rain water and go for rain water harvesting. They store the rainwater in tankas by making a simple detachable connection to it. Almost every family is having their separate tanka. Monthly twice the tanker has to be filled by the tractor tanker and for each filling the family has to pay nearly 1500 rupees. In this way nearly 3000 rupees is the monthly average expenditure of each family to have water consumption. One big pond-like structure is there called as Naadi, but the water level of the Naadi is also very low because of the last 2 years of drought. Naadi is specially constructed for the domestic animals for their water consumption. And the water tankers fill water from these Naadis in order to fill the tankas.

Objectives of the Study

- To reconstruct the Dabhad Naadi.
- To know about the different schemes that are involved.

Brief Description of the Study (Research Design)

- The data collected here is from primary sources that are from personal interviews and talking with local people.
- The data collected from secondary sources were either linked case studies or government websites.

Story Line

Challenge

The challenge in this case is the reconstruction of Dabhad Naadi and controlling the situation of water scarcity upto some extent. Dabhad Naadi is a type of Pond (*Talav*) which is located in between the Ed-Sindhari village and the Dabhad village in the Ed-Sindhari panchayat of the Block Sindhari. Dabhad Naadi is surrounded by areas like small hills due to which all the rain water come together and accumulate into the Naadi.

In Rajasthan, people were dealing with the problem of water scarcity from long ago. They have come up with solutions which basically directs towards the adaptation of traditional methods for storing clean water. People there used to have storage systems for storing clean water such as naadi, tanka, khui, etc. A Naadi is basically a kind of pond, which is constructed in such a way that it is used for the storage of rainwater. Dabhad Naadi is one of the oldest naadi in the Ed-Sindhari block and is believed to be about 500 years old by the villagers. People and the animals of the Ed- Sindhari and surrounding villages were dependent on Dabhad Naadi from long ago. With years, the problem of water was increasing and the deterioration of Dabhad Naadi also started taking place with time. It was now time for the reconstruction of the Dabhad Nadi.

Before the deterioration of the Dabhad Nadi in the year 2015-16, it had the capacity of about 1000 Tanka every year and a single Tanka has the capacity of about 32000 litres. So, the capacity of the Dabhad Nadi is around 32000000 litres of water. During that time, there were around 15 to 20 private individual Tankas in the whole Ed Sindhari panchayat and those Tankas were owned by the higher caste people of the village which were the Jatts and the Rajputs.

Response

People of the village started discussing about this issue and took it to the gram panchayat. In the gram sabha and the village meeting they discussed the insufficient water problem and how they can tackle this problem.

During one meeting, a solution came that the Naadi should be re-constructed as well as the depth and width of the Naadi should be increased. Now, there was a need for ensuring the security and cleanness of the Naadi.

Previously, people from the panchayat used to do the cleaning of the Dabhad Naadi on Amavasya, Purnima and during festival seasons and before the rainy season. On that day, one person used to go to all the surrounding villages and invite the people for cleaning the Naadi.

Action Taken

The re-construction or renovation of the Dabhad Naadi was started in the year 2015-16 and it almost took 6 months for the renovation process to complete. While reconstructing it, they decided not to cement and concrete the bottom of naadi because it will eventually result in polluting the water and quality of water will not be good for drinking afterwards. One unique thing about Dabhad Naadi is its soil. People believe that the soil of the nadi is storing the water in good quality. The total budget for reconstructing of the naadi was 50 lakhs. 45 lakhs out of 50 lakhs were donated by the government through the “Chief Minister Jal Swavalamban” scheme. The remaining 3 lakhs out of 50 lakhs were contributed by the villagers and 2 lakhs was given by the sarpanch of the village and 300 tree plants were planted beside the naadi for security reasons.

Now, around 1500 households get drinking water from that naadi. Every family has their own private individual Tanka in the whole Ed Sindhari panchayat and now the Tanka’s are not only owned by the high caste peoples but also by the lower caste. After the reconstruction of the Naadi, the water capacity has increased. Now the water capacity of Naadi has become equivalent to 10000 Tanka’s every year. So the water capacity of Dabhad Naadi has increased to around 320000000 litres of water. Although, there is a tanka in every house in the Ed-Sindhari village and Dabhad village though during the summers, people were facing the problem which is now relaxed. Now, Ed-Sindhari panchayat is getting sufficient drinking water because of the Naadi and some people from the village also got jobs through the MGNREGA scheme. By the efforts of the people they got help from the state government. Health related problems were

also reduced. Besides everything the people made their own decision, worked themselves and took all the benefits. Could there be a better example of people's participation?

Present Situation

On 22/11/2019, a meeting was organised for the discussion on utilization of the naadi water. As due to less rainfall this year the quantity of water in the naadi is less. During the meeting, they discussed on this issue that this year there is less rain water so that's why there is very less water in naadi. So, they discussed this issue and decided that this year they will not use this water for themselves and will keep this water for the use of animals and birds. So, tankers will be prohibited for this year. Every year, they use to keep one person for the maintenance and cleaning of the naadi but this year they will not appoint any person. Before this, every year they used to give one tanker of water for 100 rupees but this year they can't, so the income generation will not be there. As per the sarpanch of the village, Puraram Ji said during the meeting that, they are planning to give a electricity connection near to the naadi so that they can put one motor there for better convenience. So, it will be more flexible and easier to get water. As per some of the owners of cattle Sail Singh and Amar Singh and Chinna ram Chaudhary, this year they have taken good decision to open this naadi only for animals drinking because this year sufficient rainfall didn't happen and because of this the naadi is not filled completely. As per the Prem Singh ji²² (security person), they have planned to plant trees beside the naadi in the catchment area. They have also planned to have a motor and a separate pipe line for drinking purpose of the animals.

Questions for Discussion

1. Do a situational analysis of this case.
2. Provide alternate solutions for this case after examining different criteria.
3. What other schemes can be connected to this situation, from which people could have been benefited?

²² All the names have been altered in order to respect their privacy.

Discussion of other alternate water resources that are being used in arid regions like this and can be a useful technique for Ed Sindhari.

Lessons Learnt

The lessons learnt from this situation are

People participation plays an important role in solving an issue in rural areas.

One must know or be aware of all the schemes that can be availed to do a job.

Both people and the government have to work together to carry out a development work successfully.

Course Positioning

This caselet can be used in courses like Development Administrative Program (DAP) and Micro Program Planning (MPP) where different government rules and schemes can be linked along with that, assignments like preparation of micro plan can be given. This caselet can be used to describe the different schemes of government that are or can be used in that situation. Can be an example of a case where people participation along with involvement of government led to success.

We can also connect courses like Managerial Analysis (MA), where the case is analyzed deeply to get alternate solutions or alternate schemes that can be used here.

Conclusion

As I have discussed with some of the key members of the Naddi and the village, we have gathered some ideas to develop the efficiency of the age old Dabhad Naadi. The critical discussions could be like, Cement flooring of the naadi could be a best solution to increase its water retention capacity of the naadi. To maintain cleanliness of the water regular chlorine treatment is required. For easy accessible of the people, motors with pipe connections are required. Plantation of trees on the catchment area could be a good idea to retain the soil which will be helpful for water retention also. Separate water pipe lines to be established in the naadi for animals, which will be beneficial in maintaining the cleanliness and easy accessibility. The rationale behind

my selection of Dabhad Naadi for my caselet is that, the naadi has the immense potential to solve the water scarcity issue of the village to a certain level. The naadi with some modification could be able to do that. Each household of the village is now paying nearly one thousand to two thousand rupees for drinking water. All are having a tanka set up in their houses which are the most used mean of water source for them. Dabhad naadi with these modifications can be a primary source of water to the villagers and by which each household could save nearly fifteen hundred rupees per month. People can use this money in animal rearing and agriculture which will increase their economy.

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Photos



Catchment area of Dabhad Nadi



Water channel to the nadi



Government Schemes for Dabhad nadi

The Study of SHG of the Tribal Village Kalitala

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Introduction to the Village

Kalitala is a micro-level village falling under Baigachi 2 Gram Panchayat of Gazole Block in Malda District, West Bengal. There is a primary school in the village named Jigin Primary School up to standard four. The nearest Block Primary Health Centre is in Hatimari which is approximately 7 kilometers from the village. According to my primary research, the literacy rate of the village is very low. In fact, maximum students are the first generation in the village going to school, that too in fewer numbers.

Identification of the Problem

The people in the village came to India from Bangladesh as migrants. The main problem was that the maximum people in the village didn't have their own lands. Another problem was that the people were illiterate, so their only source of income was manual and agriculture labors. Even now, the maximum of the households doesn't acquire their lands. A few families have their land now, that too in very small quantities. They still depend upon manual and agricultural labor as a source of income. Another problem that prevailed at that time was the poor health condition of people as they didn't have the knowledge and infrastructure to detect or treat diseases. The people lived very miserable lives full of poverty and diseases.

Review of the Literature

There are similar livelihood cases that are needed to go through to substantiate this caselet. For example, how Rajasthan Samgrah Kalyan Sansthan, an NGO which works for women empowerment has established 175 Self Help Groups and how it impacted the lives of women. For instance, Vimala who is an associate of Rajasthan Samgrah Kalyan Sansthan got benefited from the SHG formed by the organization. They used to

deposit money and avail loans from banks. All the members of the SHG worked as confectioners. They bought tools required for the task from the loans they used to get from banks. This made them self-reliant and financially stable. Another instance that can be taken is of Sunita, who was also a member of another SHG established by Rajasthan Samgrah Kalyan Sansthan, whose life got impacted due to SHG. Her living condition was very bad, as what her husband earned was not enough for survival and she had to do odd jobs to sustain her family. She got associated with the SHG which helped her to avail loans. She started a fancy store with the loan she availed and gradually became famous in the village. Now, her family is in a much better condition. Another instance can be the SHG named Jotakanali group in the Pathardoba village of the Bankura district in West Bengal. The group used to rear more than 4000 chickens and maintained the farm together as a group. They were very satisfied as they all were community people and they all wanted to pursue this practice in the future. The women in the group belonged from different social backgrounds. Despite that, the women worked in harmony leaving behind all these differences. They were happy with what they were doing as that gave them a sustainable livelihood.

Objectives of the Study

- To understand the importance of community building
- To understand the importance of SHG
- To study the livelihood of people and to analyze the problems faced by the villagers
- To analyze the importance of rural management in dealing with problems faced by villagers

Brief Description of the Study (Research Design)

This caselet is based on primary research. I have done surveys of the people in the village to know about their

livelihood conditions. I have also interviewed Martha Mardi to know the story which is used to write the caselet. A sample of 50 households in the village is taken. I have also interviewed Mr. Shibesh Das, founder of RCHSS and confirmed the story about Martha from him.

Story Line

Challenge

The people in the village were tribal. They were deprived of the basic rights that a person as an individual should enjoy. The people worked in the lands of other big farmers and landlords. Most of the people at that time didn't have their lands, so they received very low wages or grains from the big farmers and landlords. Their living condition was very poor. Also, as they were illiterate shifting to other occupation was a problem for them. Only working as agricultural and manual labor was their only way out. Also, as they didn't have knowledge, skills, and infrastructure to diagnose and treat diseases, it caused many child and adult deaths. It caused a grave pain in them as they saw their loved ones, be it a son, a daughter, a father, a mother or anyone who was dear to them died in front of them, and they couldn't do anything rather than watching it helplessly. For income, the males of the family went outside for labor work leaving their families behind. Also, alcoholism was becoming a problem amongst the males of the family. The people manufactured alcohol in their houses. That was a culture which is followed by some of the families in the village.

Response

Martha Mardi, a resident of Kalitala village was very concerned about the situation over there. She was worried about the living conditions of the people over there. Also, the health issues which occurred in the village troubled her. It was not that she was only concerned about the people over there. Some other females and males were also concerned about the condition of the villagers. But she was not reluctant like others and wanted to make a difference in the lives of the people. She contacted Rajadighi Community Health Service Society(RCHSS), a renowned NGO in the area

working on improving the status of women, community health, education, ability to face disaster and many more. Martha along with some other ladies were sent to Raiganj Social Welfare Institute to get training on health under Child Survival and Safe Motherhood program for 10 days by RCHSS in the year 1995. This helped them to at least diagnose the diseases and take some preventive measures to save the lives of the ill people. They gained knowledge about how to take care of pregnant women and how to take preventive measures at the time of delivery of a child. There, they also learned about the basic symptoms of diseases which could help them to diagnose diseases like jaundice, mumps, typhoid, etc. This reduced the number of deaths in comparison with the earlier context. Martha once saved the life of a child suffering from typhoid. The parents of the child helplessly watched their child's suffering. Martha understood that the child was suffering from typhoid by analyzing the symptoms. After that, the child was treated in a hospital and was saved. As the men went outside the village for labor work in the non-cropping season, the responsibility was on the women to take care of their loved ones. The women of the village were willing to take that responsibility. They were also aware that Mr. Shibesh Das worked in the field of development. Martha along with few other ladies being very positive about the results contacted Mr. Shibesh Das, the founder of RCHSS and urged him to help them to form a Self Help Group in the village Kalitala.

Action Taken

The Self Help Group was formed with the help of Mr. Shibesh Das(RCHSS) in 1996. It was like a ray of hope for the women of the village. They found some hope to come out of their misery. Martha Mardi along with the other two women were made the leaders of the SHG and the group consisted of 15 members. They were tribal, so their living condition was very poor. They knew that making a huge difference in the livelihood of the people would be very difficult, but making even little differences were important for them. The group was provided with five cows, six goats from RCHSS. The members of the SHG used to breed them and give the newborn to the person in need of them. They collected the money needed for the five cows and six goats which were given

by the center and gave it to another member of the SHG. In that way, the money was rotated amongst the members. The money was given to another member by adding interest to it. Also, it helped them in livestock rearing. They also used to spread awareness about health issues in the village. The members of the group used to deposit two rupees each and gave the money to the person in need with one rupee as interest per month. But doing all these was not at all easy. Alcoholism and reluctance were of the people was a major problem. Mobilization of the community was very tough for them. Convincing tribal people who didn't have any idea about what SHG is, to trusting women and making the men listening to women was very troublesome. But still, the members didn't lose hope and tried their best to work for the community. They tried to collect money and give loans to people for agriculture and even for repairing their shelter. But still, there was not a considerable amount of change in the living condition of the people. Procuring drinking water was a huge problem faced by the villagers of Kalitala. The members of the SHG pleaded and requested the Panchayat for installing a submersible pump in the village. Also, due to constant requesting the Panchayat by the SHG, a pond was dug in the village and concrete roads were constructed. Seeing the efforts made by the members of the SHG more women became interested in joining the group giving rise to another SHG in the village. Gradually from two rupees the amount of deposit by the villagers reached 50 rupees and the money was deposited in the bank. In case of any medical emergency, the group used to take loans from the bank, and the money was given for the treatment. Once the patient was healed only the principal amount was asked from the concerned person and the interest was paid by the group members. Martha Mardi was sent to Krishnanagar for another training on disaster management which was in association with West Bengal Government and UNICEF, and at that time she had a meeting with the District Magistrate related to disaster issues prevailing in rural areas. The SHG managed to establish an Anganwadi Center under Integrated Child Development Services program in the village.

Martha Mardi is also a member of the managing committee of RCHSS. Being a woman and tribal, what

she did with the SHG and for the people was commendable. Being from such a poor village it was a feat she achieved.

Questions for Discussion

1. Why are community building and mobilization important for the improvement of the livelihood pattern of any rural area?
2. For marginalized people who depend on agricultural and manual labor, what alternative source of income should be focused on by the people?
3. What are the steps that should be taken by the SHG so that the members of the group can be involved in different forms of occupation (For example weaving) which can help them in repaying loans taken from banks?
4. What roles does an NGO play in the formation of SHG?

Lessons Learnt

From the caselet, we learned that trust in the community is very important for development in a rural area. Even very poor and backward villages can grow by community development. We can also see how SHG can help in solving problems and help fellow people to improve their livelihood. As in the case, we saw that the village Kalitala is very poor and backward. But with the help of SHG, it's condition improved. Also, the intervention of the NGO RCHSS helped the formation of SHG. Its intervention gave support to the women of the village to form the SHG. The cows and goats given by RCHSS gave the women hope and it also helped them in livestock rearing. So, the importance of NGOs in the formation of SHG can be known from the case.

Course Positioning

- **Rural Livelihood System-** The caselet consists of the occupation, lifestyle, health condition and financial condition of the people living in the village and how the people lead their lives on a daily basis. So, this can be connected with the Rural Livelihood System course.

- **Development Administration and Policy-** The caselet consists of Government programs and schemes like Integrated Child Development Services Scheme and Child Survival and Safe Motherhood program. It can be connected with the subject Development Administration and Policy as a lot about Government Schemes and Plans can be known by this course.
- **Community Mobilisation and Institution Building-** The caselet consists of the formation of SHG and the problems faced while forming it. This can be connected to Community Mobilisation and Institution Building.
- **Societal Analysis and Development Action-** This caselet has the lifestyle of tribal people, and the discrimination they faced as they were tribal. This can be connected with Societal Analysis and Development Action as in this course, the history and the struggles of tribal people are given. So, it can be connected with the caselet.
- **Social Research Method-** This course can be connected to this caselet as for writing caselet and writing a review of literature or to analyze a village in terms of population, demography, etc, either from primary or secondary research, Social Research Method course comes in handy.
- **Managerial Analysis-** From analyzing a case and giving the best possible solution about a certain problem to frame a case properly, the Managerial Analysis course is very important and helpful.

Conclusion

Tenacity and hard work can cause wonders. Even if in the beginning the success rate is insignificant, persistence and willpower with a fixed aim towards success are bound to bring results. Even if the result is not very significant, but gradually there would be an impact. Martha Mardi being from a micro-level village to becoming the leader of an SHG with the help of RCHSS and trying to make an impact in the lives of the fellow villagers despite all odds is an inspiration.

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The Study of Water, Sanitation and Hygiene (WASH) in Mandiravalasa

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Introduction to the Village

Mandiravalasa is a medium-sized village with nearly 350 households, located in Garividi Mandal, Vizianagaram district. The major crops cultivation in Mandiravalasa are Cashew nuts, Mango, Paddy, Groundnut and nominal crops are Jowar, Black gram, Horse gram, and Sugarcane. They have 365 days irrigation facility since it lies in the coastal area with only 40km to Govindapuram beach. Generally, water is available at the ground level of 200 to 300 feet for borewells. People described their agriculture work as the main work and mason, auto driver job as their nominal work.

There are two schools in Mandiravalasa, one is government primary school having students from first to fifth class, and one is Balabadi (pre-school) which is run by NGO Sodhana. Mandiravalasa doesn't have any provision for hospitals/clinics, but they have a privilege by having Sodhana trust in nearby town Cheepurupalli which is looking after people's problems in 40 villages including Mandiravalasa village. There are two temples in this village, Rama Mandiram, and Hanuman temple. Visakhapatnam and Vizianagaram are the two nearest cities to the village, and there are roads and railway connectivity for it. Cheepurupalli railway station is the nearest station which is about 4.5 km from Mandiravalasa.

According to the 2011 census, "Mandiravalasa has a lower literacy rate compared to Andhra Pradesh. In 2011, the literacy rate for the village was 43.11 percent compared to 67.02 percent for Andhra Pradesh. In Mandiravalasa, male literacy is 52.36 percent, while female literacy is 33.12 percent". But now the situation has changed a lot of youngsters are into studies thus increased the literacy rate to 65% now.

Latest details of Mandiravalasa – 2019

Particulars	Total	Male	Female
Households	342	-	-
Population	1110	535	575
Children (0-6 years)	60	36	24
Literacy	68%	72%	65%
SC	90	44	46
ST	130	63	67

(Source: Own survey, Data from Primary School and Data from Anganwadi)

Identification of the Problem

Rural areas are safer than urban areas in getting environmental problems. But still, there are plenty of problems in rural areas that are still unnoticed and in under development. The problems in Mandiravalasa village are mostly human made. Adding to that most of the villagers are uneducated that makes the situation worse. One can easily observe the sanitation patterns people are following, and they can decide how pathetic the situation is. Illiterate and poverty impact is more and is playing a vital role in keeping all these problems alive. Some people are opting for open defecation though they have attached washrooms to their houses and the irony is they have community washrooms-built backside to the village built by the government which is left unused. Reasons are there for not using the community washrooms like complaining about privacy due to the washroom doors are faced roadside making uncomfortable for women, and there is no water facility, one needs to carry water on their own in buckets. While going for open defecation, some people got victimised by snake and scorpion bites. Still, there is not much change in their activities as one expects.

Lack of drainage facilities is also another major problem which directly or indirectly spreads the unhygienic areas and diseases along with it. Only one by the third part of the village has a drainage system that too open drainage system whereas another one by the third population has no drainage system. Open drainage scenes are pathetic on the major proportion of the village. The household wastewater like bathing, cleaning their dishes, washing their clothes and its water releases into the roadside and gets stagnant there causing health issues due to unhygienic surroundings .

Another major concern in the village is, people are fetching water by removing the taps not by turning it on for the only reason that they can fetch fast and easily. Adding to that, people are using excess water, and after fetching water, faucets are left unclosed, and their ignorance leads to situations even worse in terms of maintaining surroundings hygienically. Burning plastic in the name of cleanliness shows their lack of awareness on pollution. People are confined to a smaller region that they don't even know how health education can bring a change in their lives.

Review of the Literature

“An ideal village will be so constructed as to lend itself to perfect sanitation...The very first problem the village worker will solve is its sanitation.” - *Mahatma Gandhi*

Worldwide 1.1 billion people are practicing open defecation, and 81% of them live in ten countries. India alone has 58% of them. Sanitation is a major concern for rural India for decades. It includes water supply management, making open defecation free(ODF), environmental cleanliness, etc., lack of any of these will impact people's lives directly and is a reason for out spreading the health concerns. (Source: *Claudia Irigoyen, India's Total Sanitation Campaign*)

A study revealed that 72.63% of the population in some states in rural India are practicing open defecation irrespective of having or not having toilets. In 1986 the government of India introduced the Central Rural Sanitation Programme to improve the quality of rural people, to provide dignity and privacy to women. By

giving more prominence to the Information, Education and Communication government launched the Total Sanitation Programme(TSC) in 1999 with a motive of making rural India open defecation free. As a successor to TSC, in 2012 the government launched Nirmal Bharat Abhiyan(NBA) to accelerate the rural sanitation coverage by allocating more budget and with renewed strategies. In 2nd Oct 2014 Narendra Modi, the prime minister of India launched the Swachh Bharat Mission with two Sub-Missions, the Swachh Bharat Mission (Gramin) and the Swachh Bharat Mission (Urban) to work on both rural as well as urban to improve Poor sanitation and hygiene in rural areas through different activities. Till 2019, the government claimed that they constructed 9.16 crore toilets resulting in 98% sanitation coverage in rural India. Studies were saying that constructing toilets in mass numbers is not going to help rural India in the eradication of poverty in Sanitation. People's cultural and behavioral components have a major impact on Rural Indian sanitation which are established age-old practices. It needs behavioral changes from people, and it can happen when officials go to people to create awareness of health. One can see better results when only there is participation from the community and individuals. And to increase participation one must conduct awareness campaigns, showing results of other villages which opted ODF, facilities they will be getting, government schemes in helping them to build their independent toilets. (Source: *UNICEF, Total Sanitation Campaign(TCS)*)

India achieved the success of building a staggering mass number of toilets to make India open defecation free as a part of Swachh Bharat.

Now India's biggest challenge is to get all Indians to use them.

Objectives of the Study

1. To understand the perception of rural people about Sanitation
2. To understand the Cultural and Behavioral attitudes of rural India
3. To know the quality standards of rural living life
4. Understanding the ground level problems of people for not opting ladder facility.

5. To know how community participation helps in achieving standards.

Brief Description of the Study (Research Design)

The Research design for this case study started by closely scrutinising the village in person, by paying attention to the village surroundings, by interacting with the villagers and collected primary data from available sources. All the data and information accumulated here is extracted majorly from primary data and marginally from secondary data sources. Primary data collected by keen observation of the village lifestyle and by conducting semi-structured interviews with Mandiravalasa villagers, School teachers, and students. Secondary data collected by accessing and analysing a few articles, web blogs on sanitation and education. Followed unstructured interviews and discussions with villagers to collect primary data. The references for the secondary data sources are given below.

Story Line

About ten years before people used to fetch water from wells for all purposes even for drinking. Since it lies on the coastline of Andhra Pradesh, they can find ground water at minimum feet levels unlike Rayalaseema (another region in AP where people suffer from frequent droughts) Villagers used to suffer from typhoid, cholera due to using new water for drinking purposes. Another issue is most of the people opting for open defecation despite having or not having independent or community toilets.

Challenge

India has challenged all the time. Likewise, Mandiravalasa also has major concerns about sanitation and health. Sanitation covers most of the health-related issues which are directly and indirectly impacting people's lives. The foremost concern in Mandiravalasa village is bringing awareness about health education and its influence on their daily activities. Just 60.80% of households in Andhra Pradesh have improved access to safe drinking water, with 73% of the total households are being provided by piped water supply. There is

significance influence from cultural and behavioral components on Indian villages in following established practices like fetching drinking water from open wells, going to defecate in the open, etc. Open well water is the main source of the village for different activities and they often got ill due to drinking unpurified water. Prevention of contamination of water in the distribution system is a considerable issue in the village. And no one bothered about building independent toilets despite giving priority to women's privacy and dignity. They do not realise that they are sacrificing their dignity as the open defecate fields are using for mobility. That cultural lag is visible in villagers. And there are reasons for not building or for not using toilets like no proper drainage system in Mandiravalasa like urban towns, maintenance issues, used to defecate in the open, growing water scarcity and potential for water conservation, some people are willing to build, but they are financially poor. Even if they get a subsidised toilet, they cannot draw drainage canals on their own. So, sustaining water, sanitation and hygiene services for the long-term is a problematic challenge for everyone in the village and for the officials.

Response

The villagers are used to open defecate, and they are continuing it. Awareness among themselves is increased, and they started looking to build their independent toilets and their cultural habits of fetching water from the well is gradually decreased. Government officials played a key role here by setting the piped water supply system through the two water head tanks in Mandiravalasa.

Action Taken

In 2015 only 44% of people have at least basic sanitation facilities, and it gradually increased to 59.5% in 2017, and in 2019 India achieved 98.9% sanitation which is huge in number. The NDA government had built over 9.16 crore toilets under SBM(G) in their 5-year term from 2014 to 2015 which increased the sanitation facilities coverage and thanks to our esteemed Prime Minister Narendra Modi for his initiative that changed millions of people's perceptions in villages including Mandiravalasa. The government officers started visiting Mandiravalasa

village to promote awareness about hygiene and sanitation. And the government started exercising critical rules by stating people who have toilets only can access ration cards. Under the central government scheme to give subsidised toilets, most of the villagers have built their own independent toilets irrespective of their caste and creed. For the financially poor people, the government has built community washrooms in the village in two places. One is built on the roadside of the back of the village, and another one is at the village cemetery location. The information, education, communication from the government played a key role in transforming mud to majestic. For drinking water, people are using the municipal taps which are in every street. No one is fetching water from wells; only they are doing for irrigation intent.

However, people are reluctant to use the toilets while the government is constructing toilets in huge numbers. The cost of cleaning toilets amounts to thousands of rupees which villagers cannot afford and come out of practicing established practices is one of the reasons. And water taps are left unclosed after usage, which causes water stagnant making surroundings unhygienic.

Questions for Discussion

1. What are the main reasons for community washrooms left unused in Indian villages?
2. Is completing constructing toilets under different schemes make village/district/country open defecation free?
3. Are people willing to give up their old traditional practices like using open bathing, open defecation, water fetching from wells?
4. What is an understanding level of villagers about the hygiene sanitation practices?

Lessons Learnt

Completion of a project doesn't mean it is successful; it achieves success only when there is participation from people.

To have quality standards in projects, leaders must increase transparency and accountability, and that happens when the community participates.

One must give importance to people's privacy and dignity.

Course Positioning

The caselet is ideal and suitable for the course in Rural Planning and Management, Rural Development, Rural Health Education, and Rural WASH. As the caselet explains the story of village habits, perceptions, their level of awareness about the importance of sanitation and health education. This caselet would help to know the real situations in rural villages and to raise awareness among people about to rethink wellbeing.

Conclusion

This caselet is very suitable to analyse rural livelihood and their prima activities when it comes to health education and sanitation. This caselet is based on participant and non-participant observations and unstructured interviews with individuals. The main argument of the case study is understanding people's perceptions from the side of rural India. The rural sanitation coverage of the village is lagging because people are not ready to give up the age-old practice of open defecation. The governments are successful in constructing toilets but failed in bringing awareness in people and making them use it. This study concentrates on several major and minor issues that villagers are facing due to their acts. And, there is a significant difference in different castes in following and in availing healthy sanitation activities.

The paper also highlights that the word coverage alone is not a sufficient indicator of the effectiveness of sanitation and water supply. Although the government reported, coverage is much higher in across Indian households, the distance to usage and access is less.

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Photos



Community washrooms left unused in the village



Picture showing how villagers fetching water from taps and they are left unclosed after using thus making surroundings unhygienic



The ground reality of independent toilets built under the scheme Swachh Bharat



Government promoting toilets through advertisement campaigns

The Study of a Mushroom Cultivator of Kewal Village, Jamui District, Bihar

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Introduction to the Village

Kewal is a village which is located in Gidhaur block in Jamui District of Bihar. Purbi Guguldih is the gram Panchayat of Kewal village. Kewal is situated 22 Km east of Jamui and four and a half-hour away from the state capital, Patna. There are 364 families in the village. It has a total area of 651 hectares. The total population of the village is 2124. The total population of Bihar is around 10.41 Cr. Number of voters of Kewal village is 1376. The literacy rate of Kewal village is 48% which is less than the literacy rate of Bihar which stands at 61.80%. The male literacy of the village is 58% and the female literacy rate is 42%. But only 10% of females have completed their secondary education. The child sex ratio of the village is less than that of state. The child sex ratio of Kewal is 736 whereas the child sex ratio of Bihar is 935. The village is divided into tolas like Manjhi Tola, Yadav Tola, Pandit Tola, and Musahar Tola.

Education has improved a lot. There is one school in the village and it is taken care of by NGOs and independent faculties. There is no primary health care in the village. Primary health care is located at Purbi Guguldih. For severe health problems, they travel to Gidhaur, Jamui, etc. There are two Anganwadi and one Balwadi center in Kewal. It provides non-formal preschool education as well as nutrition. There is a community service organization named 'Parivar Vikas' situated in Chandrasekhar Nagar. Parivar Vikas started on Dec 2, 1988. It has been carrying out many programs such as child protection, education and health and livelihood promotion in Kewal. It has also helped to stop many child marriages. There is sponsorship of ChildFund in its program. They work with the government for child rights. Chhath is a famous festival not only in Kewal village but in complete Bihar. Languages used by the people of Kewal village are Hindi, Thenthi,

and Bhojpuri. Litti Chokha and Tilkut are the famous food in this village. Beedi making is practiced among the middle-aged womenfolk in the village. Mushroom cultivation is prevalent in the village because of an entrepreneur named Mr. Mohan Keshari. He is a famous mushroom cultivator and trainer. Kewal village is also known as Mushroom Gram.

Identification of the Problem

In Bihar, agriculture is the main source of economy. Most of the people of Kewal village are dependent upon agriculture. And Kewal is a drought-prone area. In winter the village has little rainfall. The soil of the village is also not very fertile according to the villagers. The average annual rainfall of Kewal village is only 1,370mm whereas the average annual rainfall of Bihar is 1031mm. Farming is possible only for six months in the village. Paddy and Potato is the most produced crop in the village. Due to lack of irrigation facilities wheat is produced in lesser quantities. Mr. Mohan Keshari belongs to a poor family. Earlier in his life, he had faced many problems. He had faced many financial problems in his life. His father was a laborer in West Bengal. Later his father's health became notorious and his family had financial problems. So he started selling vegetables in the market during his graduation. But he didn't continue it for a long period. Later he started his career as a compounder. Then he thought of beginning agriculture farming. He continued it for a few months but soon he realized that farming is possible only for six months in the farmland of Kewal which will not provide him sufficient money.

In 2009, Patna Agricultural University had organized a mela at Patna Gandhi Maidan in Patna. Mr. Mohan had gone to the mela where there was a stall of mushroom seeds. They were giving some information about mushroom cultivation. It impressed him and he decided to know more about it. He took the training of mushroom cultivation at Patna Agriculture University for 7 days. And later he started his own business of

mushroom in Kewal village. He started selling mushroom seeds, fresh mushrooms as well as dry mushrooms in the village as it is a profitable business. He encouraged people about mushroom cultivation and also started giving training of mushroom cultivation to the people of Kewal village. It helped many unemployed workers to earn money. It is very profitable in comparison to the beedi making business.

Review of the Literature

Mushrooms are important in both nutritional and medical point of view. Moreover, fertile soil is not required for the growth of mushrooms. Mushroom cultivation business can be very profitable. In the market, button mushroom has more demand as compared to oyster mushroom. But button mushroom is difficult to produce as compared to oyster mushroom. So in a rural area, people prefer the production of oyster mushrooms. There is a lot of scope in the mushroom cultivation business in India. Mushroom production requires little land. It is good for health problems as it consists of anti-cancer elements. The Mushroom cultivation business is a good opportunity for the farmers of the village. Moreover, less capital, less space and less time are required to start the mushroom cultivation business. One can start this business on a smaller scale.

Objectives of the Study

- To identify whether Mr. Mohan of Kewal village can be regarded as an entrepreneur or not.
- To determine how Mr. Mohan brought the awareness of benefits about the mushroom in Kewal village.
- To describe how mushroom cultivation business can be considered as a profitable business.
- To describe how a poor person of Kewal village became a successful mushroom cultivator as well as a trainer.

Brief Description of the Study (Research Design)

The caselet has been prepared by taking the personal interview of Mr. Mohan Keshari who is a mushroom cultivator and trainer. He belongs to Kewal village which

is located in Bihar. Information is also taken from the articles, government documents, etc. An interview is taken to collect the primary data. The questions used during the personal interview are how did he think about the mushroom cultivation business, how did he get the opportunity to start this business, why mushroom cultivation business is known as a profitable business and many more. Secondary data or information about Kewal village is collected from the Sarpanch of the village and block office located at Gidhaur in Bihar.

Story Line

Challenge

In 2009 Mr. Mohan Keshari had gone to a mela organized by Patna Agriculture University held at Patna Gandhi Maidan in Patna. There he received the idea of mushroom cultivation. Dr. Dayaram gave him a chance to receive training on mushroom cultivation at Patna Agriculture University. He was facing some financial problems so he thought of starting his own business of mushroom in the village. He had brought some bags of mushroom seeds from the University. So he planned for mushroom cultivation but he faced opposition from his family as it was a new process. The society members also started criticizing him. After 25 days he got fresh mushrooms and it gave a positive result to him. Government officials also praised him a lot and bought 1kg mushroom at Rs 200. The family members also started to support him.

With an increase in demand for mushroom in the village, the transportation charge of Mr. Mohan started increasing because he was bringing the mushroom seeds regularly from the state capital market. So to resolve this problem he thought to produce mushroom seeds himself. He took the training of the production of mushroom seeds for 1 month at Patna Agriculture University. But he didn't have the required money and machines to produce mushroom seeds. He needed about 15 lakh to start this business. NABARD provided him 9 lakh 68 thousand to purchase the machines like Autoclave, Laminar flow, etc. and in return, it asked him to provide training to 500 farmers free of cost. He has also faced a few challenges while growing mushrooms

which includes temperature maintenance, maintenance of co2 level and light intensity maintenance.

Response

People of Kewal Village had a blind belief that producing mushrooms is useless. People had criticized Mr. Mohan so that he could not uplift himself in society. But he didn't lose hope after all the criticism. He always had a belief that he will get success in his respected sector. Earlier his family was not supporting him. But later his family trusted him and started helping him in the process. He upgraded his skills from mushroom cultivation to the production of mushroom seeds. Moreover, he always wanted to motivate and encourage the people of Kewal village. He wanted to help the poor farmers so he started giving them training in mushroom cultivation. It helped many farmers in the village. Many farmers took training from Mr. Mohan and began their own business of mushroom. It also increased his customers in the village. At first, he started the production of oyster mushroom seeds. He cultivated it and started selling it. Later he thought of producing button and milky mushroom. Initially, he didn't get success at producing button mushrooms. But because of his hard work, he got success in producing these seeds. Mushroom has a lot of medicinal properties so people of Kewal village slowly understood about it. People of Kewal village started giving him respect because of his hard work. Government Officials also visited his home and praised him for attaining success in mushroom cultivation.

Action

Mr. Mohan Keshari has motivated a lot of unemployed people in Kewal village. He has provided training of mushroom cultivation to many farmers. He has already provided training to 10000 people. With the help of CRPF(Central Reserve Police Force), he provided training to people belonging to the Naxalite area. The value of mushrooms increased in the village. Because of Mr. Mohan people of Kewal village got awareness about its benefits. Moreover, he has also provided training in Rural Self Employment Training Institute (RSETI). It helped him in earning money by giving training at various

institutes. He produces and cultivates three types of mushroom i.n. oyster, button and milky mushroom. The climate of Bihar is suitable for oyster mushrooms. He receives more profit in selling oyster mushroom. To make one packet of oyster mushroom seeds Rs. 50 is invested. One packet of oyster mushroom seeds gives 1kg mushroom. And 1 kg of mushroom is sold at Rs. 125. For the production of 1 packet of button mushroom seeds Rs. 150 is invested and 1 kg button mushroom is sold between Rs. 150 to Rs. 200. The demand for button mushrooms is more as compared to oyster mushroom. But Mr. Mohan is unable to produce the maximum amount of button mushrooms because it requires more money and the climatic condition of Kewal village sometime doesn't suit it.

In initial days Mr. Mohan was selling the mushroom himself. But nowadays he has hired professionals for selling it. It takes near about 60 days for mushroom cultivation. To make mushroom seeds equipment required are Autoclave, Laminar flow, test-tube, flask, vessels, etc. No chemicals are present in the mushroom seeds. On November 27, 2019, Mr. Mohan Keshari along with his staff provided training to people of Kewal village. It helped the unemployed workers to earn money. He also provided the mushroom seeds to the family free of cost. Parivar Vikas, the organization, provided the required fund for the program. Mushroom cultivation helped him to gain a lot of respect from the people of Kewal village. Moreover, it also made Mr. Mohan a successful entrepreneur.

Questions for Discussion

1. Why is the mushroom cultivation business is known as a profitable business?
2. Why is the button mushrooms business more profitable than the oyster mushrooms business?
3. What is the scope of the mushroom cultivation business in rural areas of India?

Lessons Learnt

People of Kewal village generally suffer because of little rainfall. Moreover, most of the people in the village are

unemployed. People of this village also suffer from poverty. Most of the people work as non-agriculture labor. And the middle-aged women are known for Beedi making. In their regular life, they earn money through this. As the soil of the village is not very fertile, farming is possible only for six months. So to earn money a person has to plan something. We learned that hard work can give you success in life. And Mr. Mohan is a good example of it. He planned for a unique business. He was criticized by the people of the village but he never lost his hope to get success in this sector. Mushroom production in the year 2009 was a new and unique process in Kewal village. But still, he took the risk to produce and sell three types of mushrooms in the village. Moreover, earlier in his life, he had faced many problems. He and his family faced financial problems. But he resolved it with his intelligence and hard work. If people can adopt stress at a high level then they can overcome such a problem without any external support. Several factors lead to poverty in the country. It increases because of poor healthcare facilities, lack of education, low productivity in agriculture, unemployment, etc. Unemployment is one of its major factors. This caselet helped us to reduce poverty in the village. Mr. Mohan has provided training in mushroom cultivation to unemployed workers in the village. It has helped them to open their own business in the village. We also got to know that the mushroom cultivation business is very profitable as compared to Beedi making business.

Course Positioning

This caselet can be used for the Rural Livelihood System as well as Rural Production System and Managerial Analysis. It will help us to know about the livelihood of the person who belongs to Kewal village. This will help the students to know about a successful entrepreneur in the Kewal village. It will also help them to know how a poor person became a professional mushroom cultivator as well as a trainer.

Conclusion

This caselet mainly shows how a poor person changed his life. How Mr. Mohan absorbed the stress and

resolved his problem. How he changed his life from a poor person to a successful professional mushroom cultivator and trainer. Mushroom cultivation business has a lot of scope in the country. It has medicinal properties and it is good for health problems. It contains anti-cancer elements. Mushroom production requires finance, space, and labor but it is a profitable business. One can easily start this business at home as it requires less capital, less space and less time. Bihar climate is suitable for oyster mushrooms. So Mr. Mohan produces a maximum quantity of oyster mushroom. But the demand for button mushroom is more than the oyster mushroom. Oyster mushroom is easy to produce but it is not scalable. Producing button mushrooms is not as easy as oyster mushroom but it is more profitable as compared to oyster mushroom. So Mr. Mohan Keshari should try to produce the maximum quantity of button mushrooms. NGOs like Parivar Vikas should continue helping entrepreneurs like Mr. Mohan. Parivar Vikas organize various programs in Kewal village where Mr. Mohan provides training of mushroom cultivation to the villagers. Mushroom cultivation business doesn't require much capital to start. The government of India should encourage the farmers by providing subsidies to them for mushroom cultivation.

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Photos



The Study of the Resurrection of SHG at Santhalpada Jhargram District, West Bengal

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Introduction to the Village

The district of Jhargram was formed on 4th April 2017 after bifurcation of the district of Paschim Medinipur. Jhargram is located in the South-West corner of West Bengal bordering Jharkhand and Odisha (Fig.1). This became the 22nd district of West Bengal with its headquarters at Jhargram. The district has 1 Lok Sabha constituency, Jhargram and 4 Bidhan Sabha constituencies namely Jhargram, Gopiballavpur, Nayagram and Binpur. The total population according to the 2011 census stands at 1,137,163 with an area of 3,024.38 sq. km. The National Highway 6 (Kolkata-Bombay Road) runs through the district. There are 8 blocks in the district namely Jhargram, Jamboni, Lalgarh, Belpahadi, Sankrail, Gopiballavpur -1, Gopiballavpur – 2 and Nayagram.

There are 2995 villages in the district and the village of study Santhalpada (named changed) is in the Jhargram Block. Santhalpada is approximately 15 km from the district headquarter Jhargram (Fig.2). There are currently 50 households in the village according to the panchayat and the 2011 census has a data of 47 households. The total population stands at 212 with 104 males and 108 females. The total agricultural land available is 38 ha. The irrigated land is 14 ha and the unirrigated land is 24 ha. The primary population is tribal (Santhals) with only a few Scheduled Caste households (Khiladi). The nearest police station is Jhargram and the nearest Primary health centre is at Chandri which also houses the panchayat office. The village, however, has a Primary sub-health centre within its premise.

Identification of the Problem

When there was a free hand given for selecting the village for the project, the final selection was

Santhalpada. There were quite a few reasons being quite

a few but the first being that the villages around this place were all very small with 20 or 30 households on an average but Santhalpada was one which had around 50 households. The second major reason for choosing this village was that this village was somewhere lagging behind many of its neighbouring villages. Thirdly, the village is a tribal village had its own language and culture which although somewhere has got blended with the Bengali culture still had an essence of its own.

Fourthly, the major reason for choosing this village and for choosing the SHG of this village was an experience at the Santhalpada plantation areas where the NGO along with the tribal villagers of the area was engaging in cashew and guava plantation. Of all the villagers who were working in the village, there were seven women and one man. This apparent picture of women empowerment and feminism was however very different because the men at most of the households were alcoholic, drunk since morning and domestic violence was rampant in many of the households too. So, it was the women who were earning, women who were getting beaten up and then alcoholism was not taking the household anywhere because most of the households had a hard time-saving anything at the end of the month.

The fifth and final reason was an incident that had happened with this Self Help Group (SHG) in Santhalpada which had a crisis with returning the money that they had borrowed and they finally did repay which is very motivating.

Review of the Literature

The objective behind the literature review is to get some relevant ideas about the topic or the region of study from studies that have already been conducted.

Nizamuddin Ahmed and Swami Tattwasarananda (2018) in the case study that they did on the literacy of Santhals

in the Jhargram region depicts that most of the people in the community are bilingual and knows fluent Bangla and Santhali (Ol Chiki). The students of the area that has been studied all study in Bangla medium schools and the literacy stands at 54.72% for the Santhals in West Bengal. Although the study depicts that the male literacy is more than that of females, what is very interesting and progressive is that the growth rate of female literacy rate is almost double than that of male. The Santhali people have come a long way from 1981 when the literacy rate stood at around 12% in West Bengal. However, higher education is a rarity among the Santhals and very few people study after class 12 with maximum studying only till class 8.

S. Galab, & N. Chandrasekhara Rao (2003) in the case study their case study on Women's SHGs in the state of Andhra Pradesh emphasizes on how the SHGs are instrumental in accelerating the growth of a nation besides providing a platform where women perform the non-traditional works of marketing or in other non-traditional sectors. Men SHGs were also present in the state but 90% consisted of women and largely to promote women empowerment largely. The study also puts light on how children's health and education have improved largely wherever the SHG could achieve even a bit of what it was meant to achieve for the women of the households and it emphasises on why it is very important and more important to have women SHGs rather than men.

Objectives of the Study

The primary objectives of the study are:

- Studying the difficulties faced by the self-help group in its formation stages.
- Knowing the lessons that the members of the group learnt from their own experiences.
- Learning about the implementations that have been done keeping in mind the lessons learnt.
- Coming up with some possible suggestions based on the current situation and previous experiences.

Brief Description of the Study (Research Design)

The study is based on primary data. The information collected and produced in the storyline is entirely firsthand information collected from the village through observations, unstructured interviews and interactions. Few of the information regarding demography were collected from the Panchayat Office. Something that would be very unfair if not told is the support from the Panchayat office and the cooperation from the SHG. The name of the village, the bank and the SHG has been changed to keep up to the anonymity of the case study to some extent. However, the case is not fictitious and the incidents described in the storyline has not been tampered with.

Story Line

Challenge

In the early decades, women issues were seen as social welfare issues and not development problems and this welfare approach had the problem of doing nothing to eliminate the social discrimination and subordination of women. Later in days policy makers started thinking on how to connect development and poor women. The United Nations Development Programme reports on Human Development from 1990 onwards put emphasis on feminization of poverty which refers to the gender biases and societal/governmental deprivations resulting in widening gap between men and women in the context of economic deprivation and scarcity thus women experience poverty at rates that are disproportionately high in comparison to men.

The success of an SHG depends on several agencies like the banks, the panchayats, the existing SHGs if any of the higher body of SHGs, in this case, the Nabarun Mahasangha. These factors played a major role here because a good active motivating agency can boost the work of any SHG. The SHG is not merely about the mobilization of the women but inculcating a spirit of togetherness and mutual help is the major laying stone of a successful SHG where Maa Anondomoyee was missing out on. The other challenge which the SHG faced is instability due to two members failing to pay and even

backing off suddenly without any kind of paperwork. While good agencies, transparency, cooperation can promote an SHG and take it to heights but there are factors like lack of training, awareness or guidance besides poor infrastructure and low educational background can also come up as a hindrance to the healthy functioning of an SHG which we see in the case of Maa Anondomoyee.

Response

Maa Anondomoyee SHG was formed in the year 2008, the formation was quite an aimless one because the Panchayat had been instructed by the government to form SHGs and they were going around telling people to form SHGs. This one lady named Rani Baskey was asked by the panchayat representative of the village (who also happens to be a relative of Rani) to get women together and start saving money, she was also told they would get loans to do business if they can form a group. No other details were given in any form. In Santhalpada there was already an SHG existing back then which was in dwindling condition, the men's group which was existing too had a hard time in surviving so it had to be dissolved. It took Ms Rani time to convince the right kind of people to come on board for the project but what the team lacked was a vision or goal of any kind. Moreover, there was no paperwork of any kind done and the members had no idea that there has to be paperwork done. After the team was formed there was no training given, no guidance provided and all the interactions with the bank or other officials were through the panchayat representative (the SHG remaining absolutely clueless about the whole thing). The only rule that the SHG had set was depositing Rs. 60 by the end of every month (Rs.2 every day) which was in turn deposited to the nearest branch of the State Unified Bank (SUB). The SHG account was getting interest on the deposited amount for the first six months till the time the SHG got a loan of Rs. 25000. But, once the loan was dispatched to the SHG, the bank stopped giving interest on the Rs. 60 per month and the SHG had no idea about the same.

Rs. 25000 was divided equally among the 10 members of the SHG. Most of the women bought goats and few did not know what to do with the money spent in buying

regular household stuffs. The later consequence was, of course, faced when repaying the money became a tough task for two. The panchayat representative also came up with a work for the SHG where two women would have to work for it every day and by the end of the work the group was told would be paid Rs. 10000. The work was completed in seven months with every woman toiling for it but they were not paid a single penny after the work and Maa Anondomoyee SHG had no written agreement to prove that they were promised any kind of money. The group went up to talk but after prolonged discussions and repeated visits, they gave up.

More than a year had passed after the loan was disbursed and just when the members started giving back the money two members of the SHG left without repaying anything because of bad investments that they had made. The two members stopped repaying after a few instalments and the burden was all upon the rest of the members who were already paying Rs 210 (Rs. 150 + Rs. 60) every month. But they had no set rules to tackle such situations.

By the end of 2010, the Maoist movement had gained grounds in the area and the local people were at loss of livelihood, they had no means of income left so the SHG got dissolved. However, there was still Rs. 8000 yet to be repaid which they mutually decided to pay SUB by withdrawing all the money that they had deposited at SUB itself till then. The total deposit stood at Rs. 18000 which meant that it was only the core money and nothing else, no interest added. That is when the SHG realised for the first time that ever since they had accepted the loan no interest was added to the savings account.

Action Taken

The group stayed dissolved for more than four years until the state government very efficiently handled the Maoist unrest in the red belt. Around 2015, Rani Baskey along with Shonamoni Murmu decided to revive the group but could not get the grounds till 2017 because of several reasons.

Getting the women back to form the group was not a difficult task this time because beyond everything that the women had experienced during the last stint with SHG was a taste of independence and a sense of importance. The very first thing that Ms Rani and Ms Shonamoni did after forming the group is called for a meeting and with proper documentation from the panchayat made rules and regulations very clear. The rights and the duties were for the first time made clear to the group and the foremost of them all was nothing should go undocumented, something that made them suffer a lot the previous time.

Everyone at the SHG now at least knows how to sign and no one in the SHG gives a thumbprint anymore which as it is ended many forgeries. From the time they all got bluffed by the panchayat representative of the village, they got closer and started understanding each other more which is a key to the successful operation of an SHG and when the SHG revived again, these women had each other's back all the time.

The success is indeed in the actions and one such action was increasing the per month amount to Rs. 100. The next step was to have at least 3 meetings every month without fail during which a reminder would be given that the day of deposition is arriving because given the limited income it is a tough task to save even Rs.100 by the end of the month. This has helped the SHG to an extent that there is still no failure by any member. However, so that the president is always ready with backup if there is a failure, it is compulsory for every member to sign and assure that they will be able to give the money on the last meeting day of every month.

The SHG has already been sanctioned an amount of Rs. 1,50,000 but they are waiting to have enough amount in the bank before withdrawing any loan. The other plan that they have made is not to distribute the loan amount equally but to distribute according to the need and according to the capability to repay the loan. In this way what has been assured is that every member has a proper investment plan in mind before the money is withdrawn.

The final action taken is the elimination of any middleman and direct contact with Nabarun Mahasangha and the SUB which leads to transparent transaction and interaction among the concerned parties. To enable all travels and miscellaneous expenses a separate fund is also maintained with minimal contributions from the members. What we made sure is to make the women aware that there are entitled to subsidies, the exact details of which they should ask the concerned bank and make things clear before taking the loan.

Questions for Discussion

- Was it right to give up on the panchayat representative when he abstained from paying the money? What could have been a better way of tackling the situation?
- Comment on the root cause of the Maoist movement in India and its tackling mechanism across states.
- When the group was formed, Ms Rani Baskey went up to the people she thought was reliant but was it the right way of forming a democratic and sustainable group?
- Is there a need for middlemen or should they be eradicated in every field?
- Women run households are still unheard of even when women are bread earners in many households, what can be a solution to this situation?
- Why men run SHGs in India has not seen much success but women run SHGs have comparatively been much more successful?
- Does strict rules always mean efficient functioning?

Lessons Learnt

The case sheds light on many lessons which we can apply in our lives, the first being not trusting anyone blindly and never so when so many other lives are also involved in the process. For any kind of work which might need us to prove something or the other later on should have proper documentation and no verbal communication is considered legitimate. The other lesson to be learnt is

the spirit of oneness when in distress, something that kept them together when they suffered the major blow. The other extremely important lesson is the spirit of reviving, not giving up and learning from the past otherwise a sustainable revival is never possible. Rules are important in groups because it keeps everyone at the same level which is extremely important and unless there is a bit of homogeneity in the whole system when it comes to dealing similar situations there ought to be chaos.

Course Positioning

The case can be used to study Development Administration Policy where we are taught about right based and need-based approach, the concept of SHG can be linked to it. The above case could also suffice as a reference for studying Rural Livelihood System. Managerial Analysis which deals with case studies and Social Research Methods which deals with the different aspects of doing any kind of social research and its tools can also be well placed in this caselet.

Conclusion

The concept of self-help groups gained significance especially after 1976 when Dr Mohammed Yunus began experimenting with micro-credit through Grameen Bank and 97% of its beneficiaries being women from Bangladesh as per the Grameen Foundation. The strategy steadily helped in bringing a revolution in Bangladesh in poverty eradication 'by empowering poor'.

Self Help Groups have in more ways than one helped elevate women in need towards a position of self-esteem and pride. Society today still judges everyone

based on gender, race, caste, sexuality and what so every small step taken and every small progress made adds up to something big in the future, every step count because one small progress by one person today will give the courage to many more tomorrow.

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Photos



Position of Jhargram district in West Bengal

Source: Anandabazar Patrika



Map of Jhargram district

Source: Jhargram District Police



The women at work in the fields



The interaction with the SHG members and a few other villagers



Individual interaction with the president of the SHG

The Study of Agriculture in Depleting Groundwater at Orohalli

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Introduction to the Village

Orohalli is a medium size village located in Hosakote Taluka of Bangalore Rural district, Karnataka with total 117 families. The Orohalli village has a population of 518 of which 259 are males while 259 are females as per Population Census 2011. In Orohalli village population of children with age 0-6 is 48 which makes up 9.27% of the total population of the village. Average Sex Ratio of Orohalli village is 1000 which is higher than Karnataka state average of 973. Child Sex Ratio for the Orohalli as per census is 714, lower than Karnataka average of 948. Orohalli village has a lower literacy rate compared to Karnataka. In 2011, literacy rate of Orohalli village was 63.62% compared to 75.36% of Karnataka. In Orohalli Male literacy stands at 71.86% while the female literacy rate was 55.65%. As per constitution of India and Panchyati Raj Act, Orohalli village is administrated by Sarpanch (Head of Village) who is elected representative of village.

Particulars	Total	Male	Female
Total No. of Houses	117	-	-
Population	518	259	259
Child (0-6)	48	28	20
Scheduled Caste	59	29	30
Scheduled Tribe	0	0	0
Literacy	63.62%	71.86%	55.65%
Total Workers	211	162	49
Main Worker	113	-	-
Marginal Worker	98	60	38

Table no.1 as per the Census Data 2011

In Orohalli village out of the total population, 211 were engaged in work activities. 53.55% of workers describe their work as regularly employed (Employment or Earning more than 6 months in a year) while 46.45% were involved in Marginal activity providing livelihood

for less than 6 months. Of 211 workers engaged in Main Work (113 workers), 93 were cultivators (owner or co-owner) while none were Agricultural labourer.

About MYRADA Organisation: Mysore Resettlement and Development Agency (MYRADA) was founded in 1968 to assist the Government in resettling Tibetan Refugees. Mysore State has since become Karnataka. After the Tibetan program ended in the late 1970s, in the year 1987, MYRADA moved out of resettlement work and began to focus on the poor and marginalized in the rural areas. During this period MYRADA was searching for a Mission to guide its strategy. This search involved an analysis of the causes which kept poor people poor, intensive interaction with people in the villages and debate within the organization. All these resulted in the Mission (Building appropriate local people's Institution), which emerged in 1987.

Identification of the Problem

Groundwater plays a significant role in the economy of the farmers of the Hoskote Taluk. Farming was, for the most part, reliant on irrigated source by widely circulated tanks during earlier days. Because of dry spell circumstances, farmers are currently relying mostly on bore wells for their farming needs. There are around 8826 bore wells in the region, which shows about the reliance of farmers on groundwater. Subsequently, groundwater has a unique criticalness for the inside and out advancement of this water-starved region and plays an important role in the improvement of this dry spell inclined zone.

There are no significant water irrigation projects situated in Hoskote Taluk. A large portion of the irrigation needs of the individuals in the region is met with groundwater. When compared to the past years, the groundwater level has decreased drastically in the present time. Prior to the groundwater, necessity was met primarily through dug wells. At present countless bore wells exist in every

town, because of persistent withdrawal of groundwater for water irrigation and for provincial household water supply due to which the groundwater level has declined. All most all the open wells in the zone are dry since about 15 years and even the vast majority of the borewells does not sustain pumping during summer (Source: Based on the unstructured meetings of the farmers of the town). The area has a sum of 209 tanks, 2553 open wells, 8826 bore wells and 43 Hectares under lift water irrigation (Source: Reference no.2).

As per the groundwater estimation studies, the whole Bengaluru Rural district is overexploited, except for a minor area of 10% of the Nelamangala taluk, which is safe. The total draft is 32.2% more than the annual replenishable recharge warranting for intensive water recharging structures like recharge pits, trench cum bunds and bore well-recharging structures etc., to be taken up coupled with efficient use of the available water by adopting drip and sprinkler irrigation for agriculture and horticulture crops.

Review of the Literature

Despite the fact that irrigated production has played a huge role in food production, globally (particularly during the Green Revolution), rain-fed cultivation still delivers around 60% the total production. The research shows that rain-fed farming will continue to play a significant role in cereal production, contributing one-portion of the increase of cereal generation somewhere between the years of 1995 and 2025. In any case, suitable speculations and arrangement changes will be required to improve the role of rain-fed farming, particularly if irrigation investment declines relative to the baseline scenario. Water harvesting has the potential in certain districts to improve rain-fed crop yields and can facilitate farmers with improved water accessibility and enhance soil health in some local and regional ecosystem, just as ecological advantages through decreased soil disintegration. Despite successful results, acceptance of the water harvesting amongst the farmers has been limited, because of the significant expenses of execution and higher transient hazard because of the need of additional inputs, money, and workforce. Water collecting activities every now and then experience the ill

effects of the absence of hydrological information and inefficient attention during the planning stages to significant social and financial contemplations, and the non-attendance of a long haul government plan for guaranteeing the sustainability of the intervention. More prominent association of farmers from the planning stages and the utilization of farmers for maintenance and information collection and arrangement of proper instructive and expansion backing could help extend the role of water harvesting. The amount of involvement of farmers in rain-fed agriculture will ensure their returns out of it. The process of a conventional way of farming and the new improvements in the process ensures a potential growth in the returns out of rain-fed cropping. Cereals yield development in downpour encouraged zones could be additionally improved by stretching out research both downstream to farmers and upstream to the utilization of tools derived from biotechnology to help ordinary cropping and if worries over dangers can be tackled, from the utilization of transgenic breeding. Along with new techniques to target rain-fed areas, investments should be made in the infrastructure and policies of the rural areas, to bridge the gap between the actual yield and the potential yields for the farmers. Important policies include higher priority for rainfed areas in agricultural extension services and access to markets, credit, and input suppliers. Successful development of rainfed areas is likely to be more complex than in high-potential irrigated areas because of their relative lack of access to infrastructure and markets, and their more difficult and variable agro-climatic environments. Investment in rain-fed areas, policy reform, and transfer of technology such as water harvesting will, therefore, require stronger partnerships between agricultural researchers and other agents of change, including local organizations, farmers, community leaders, NGOs, national policymakers and donors.

Objectives of the Study

- To study the farmers' shift from irrigated cultivation to rain-fed agriculture.
- To study how the spread of awareness of groundwater depletion in the area and switching to

sustainable methods of water harvesting impacted the farming practices in the village

Brief Description of the Study (Research Design)

The study is based on my experience of a stay of 45 days in Orohalli village, where I spent quite a lot of time with the farmers in their field and on the unstructured interviews with the locals. The inputs of my data are provided from MYRADA's (Host Organization) data along with the field visits conducted by Geologists from GEOVALE.

Story Line

Challenge

As per the study and experience around 80 to 90% of the population of the Orohalli village and nearby villages are indulged in agriculture and allied activities. Most of the farmers have their own land. Due to lack of proper irrigation facilities, the farmers cannot be active throughout the year in the fields. The major crop cultivated in the region is *Ragi* (Finger Millet), that too for 3 to 4 months of the whole years' time. Earlier the farmers depended on the bore wells and the groundwater for the irrigation source. The overexploitation of the groundwater has resulted in a depletion of the same to 1500 ft to 2000 ft. It has resulted in lesser production of crops and fetched lesser yield. The type of soil in this region is red loamy soil which doesn't allow the water to percolate fast and eventually the water gets evaporated from the surface, resulting in a slower rate of groundwater recharge. Moreover, the plantation of Eucalyptus trees in the region has only added to the problems. It not only drains the groundwater but also with its allelopathic nature degrades the nutrition of the soil. The plantation of Eucalyptus trees can be seen abundantly in the region, even in the Government-owned plots (*Source: Based on personal observation of the researcher*).

Response

Due to unregulated cropping patterns and unawareness of the harmful effects of the Eucalyptus plantation, the local people, who depend mostly on agriculture for their livelihood have suffered from low productivity and fetched low income. Although *Ragi* cultivation has brought in excellent returns to the farmers, it cannot be practised for the entire year. The other vegetables that are being cultivated in other seasons require a lot of water, but due to lack of other good irrigation sources, the vegetable cultivation is not done regularly resulting in a lack of income generation, all round the year.

Action Taken

The organization like MYRADA has helped the village farmers to shift to rain-fed agriculture and vegetable cultivation. The farmers are now more aware of different agricultural techniques such as Drip Cultivation, Line sowing method and usage of mulching paper, which helps them to use available water judiciously and increase their production. In Orohalli and nearby villages, the farmers are being approached by the organization (MYRADA) and are asked to use the micro-farming techniques taught by the organization and the other half to be fully controlled by the farmers, using their traditional practices which they have been doing till date. After the first year itself, the farmers have seen the results. The usage of water has been limited with an increased rate of production. The farmers can now easily compare the results with both the Demo plots (Controlled by MYRADA) and self-controlled plots, adjacent to each other, and take better decisions. Most of the farmers have already switched to the more sustainable way of farming and a very few now are learning from it. Such way of learning is termed as the Farmers' Field School (FFS) by MYRADA organization. As far as Eucalyptus plantation is concerned, it is still a major challenge prevailing in the region.

Questions for Discussion

1. Why Eucalyptus plantation is not banned in the low groundwater and drought-prone regions, despite their allelopathic nature?

2. How can the concept of FFS be used in other parts of the country with similar issues?
3. How can a regular source of irrigation be provided to the farmers to cultivate vegetables as well during Rabi season?

Lessons Learnt

The farmers in the Orohalli and nearby villages are open to new ways of cultivation and they are needed to be educated and involved in the transformation process. The depleting groundwater in the region has added to their worries with no other source of irrigation due to the climate change resulting in the drying up of the wells. Rainwater harvesting is the solution to all their problems. MYRADA organization along with ITC are developing watershed projects in the region, in order to help the farmers manage the collected rainwater judiciously. The farmers are now aware of the fact that Eucalyptus plantation not only sucks all the groundwater but also hampers the nutrition of the soil. Therefore the farmers are now switching to more sustainable way of farming in the view of re-establishing their future.

Course Positioning

The above caselet would fit into the theme of *Livelihood and Environment Conservation*. This case is a very good example of the need of rural management in the agriculture sector and the farmers' livelihood. The scope is wide in the area of entrepreneurship because there is a lot of scope for innovation in it which would help the farmers to fetch increased and regular yield along with more production in a more sustainable manner. The involvement of so many organizations/NGOs and different CSR activities for conserving the groundwater reflects the gravity of the problem in the area.

Conclusion

At such time of environmental crisis, we need to come up with innovative ideas to deal with it. The livelihood of an entire community lies on agriculture and certainly, they are the food providers for the entire nation. The

community's development should be given utmost importance and their economic condition should be stabilized. There are various organizations indulged in the betterment of the farmers and the groundwater conservation in the Orohalli and nearby villages. This caselet is aimed at bringing out the adaptability and acceptability of the farmers' story in the public forum from which similar regions could get inspired and adapt to newness of the methods used in dealing with the prevailing issue of depleting groundwater in agricultural regions.

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Photos



Soil Percolation Test Done by Geologists of Geovale Services



Farmers' Field School (FFS) on a Field with Ragi where both the Demo Plots and the Farmer Controlled Plots are divided by a path.



On the left Mr Murthy On his Ragi Farm (FFS) and on the left Mr. Rangappa on his Ragi Farm (FFS)



Ragi after harvesting and processing

The Study of Strengthening of the Social Fabric - The Story of Anil Kumar Yadav

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Introduction to the Village

The village Kudila is a relatively new village and comes under two wards - ward 5 and ward 8. 2 castes (OBC and SC) stay together in this village - Paswan, Yadav, Sah, Kumbhar (Pandit). The total population of this village is 1423 according to Mr. Vikram Kumar, B. L. O and Block teacher in B. R. C office located at Girdhor. The majority of the population is engaged in agricultural activity. Women take up Beedi making to supplement their income. They get 100 rupees for 1000 beedis. A typical household is able to earn 2000 rupees per month through this activity. A typical household here has 3 to 4 cows each of which gives 3-4 liters of milk per day. This is not suitable for commercial purposes. If they keep Sahiwal breed of cows they can take up dairy on a commercial scale. All usually stay in harmony except during elections. As the village comes under two blocks, there arises some political tensions during elections.

Identification of the Problem

When Bihar separated from Jharkhand, it lost much of its mining land and many people shifted to agriculture as a livelihood.

1. There is water scarcity in this village hence the farmers face the problem of irrigation in their fields. To tackle these people take up bore well digging which pushes the water table down. A river named Katara flows nearby and it is used for irrigation. A water reservoir can be constructed there for irrigation but it has not been done. Many paddy farmers still depend on rainfall for cultivation. They grow paddy for their own consumption. When rainfall does not occur, it is a hard time for them.

2. There is ample land but it needs leveling. The cost of leveling is high.

3. Out of 109 households, only 5 houses have jobs. The rest depends on agriculture and they

do not have sufficient knowledge to take up scientific agriculture.

4. For supplementing their income women take up Beedi making which leads to many health problems.

5. Many people don't take up rearing Sahiwal cows as feeding costs will be higher. They prefer to rear desi cows as they are easy to maintain. Desi cows don't produce much milk but are comparatively harder than Sahiwal cows.

Review of the Literature

Bihar is still very backward with respect to education and agriculture. Anil understood the need for a good teacher and also of mobilizing the youth for the welfare of the village community. He, therefore, started teaching the village children while pursuing higher studies himself. Through personal development and by understanding the villager's monetary problem, he became an inspiration for many youths. His innovative systems of collecting payments have benefited both him and his consumers. What he does to collect payments is that he allows payment in both cash, kind and services. The poor families who cannot pay him money can work in his fields without payment to support their child's education. He has also helped tackle corruption and create a better living for as many people as he can. Education, therefore, plays an important role in the development of any community. Tapping the potential of the youth while providing them with proper guidance also goes a long way.

Objectives of the Study

- To study the impact of education on a village society.
- To study how one educated individual is beneficial for the development of the community

Brief Description of the Study (Research Design)

For the research, focus group discussion of villagers and personal interviews of Anil Kumar Yadav was done. B. R. C. Office on Girdhor was visited and Vikram Kumar (BLO, block teacher) was consulted for information regarding the demographics. Kapil Ji and Mukund Ji of Parivar Vikas helped in conducting various meetings in the village, which ultimately provided information on who the key informants in the village are.

Story Line

Challenge

Anil, being the only child of his parents, was encouraged from a very young age to study. Anil's father used to work in Kakinada Jute Mill, West Bengal and there he studied from class 3 onwards till class 12th. Though his father left work when Anil was in class 11, he did manage to complete his schooling. As a young man he tried to establish himself in Kolkata by learning mobile repair, computer training from Barrackpore, etc. - but failed to do so. He also invested Rs. 7000 for six months in Company RMP but it did not give profits. During this period his mother's health was failing and his father was getting old. So, at the time when his friends were engaged in textile works, going to faraway places such as Haryana and Gujarat, Anil returned to his roots - his village Kudila in Jamui District, Bihar.

Early in his life, he had felt the need for a good teacher - something his village did not have. So, he took up the role himself. He offered tuition classes. He also wanted to study Geography Honors. But the nearest college was 30 km away - R. Lal's college in Lakhisarai. He enrolled there. He managed his studies and also his tuition. He was pressed for time but by sheer hard work, he succeeded in completing his degree. He used to conduct classes early in the morning at 6:00 am till 7:30 am and then leave on his bicycle for the nearby railway station to catch the PatliPutra Express to reach Lakhisarai at 8 so he could reach his class on time. The challenge here was that he was teaching classes 9 and 10 - he had to prepare himself well and the only time he was free was in the evening. During those evenings he studied for 5 to 6

hours - preparing for his tuition classes as well as his own classes. He also utilized the journey time for preparation.

Anil had two teachers who taught and inspired him in Bengal - Mr. Ajay and Mr. Santosh. He followed their teaching style and drew inspiration from them on how to teach students. He understood that each student had a different way of understanding, a different speed of grasping things; hence he followed different methods for each student. He classified students on the basis of their learning speeds. This has resulted in a lot of improvement in the students. The 2012 batch performed very well in board exams. The 2012 batch performed very well in board exams. This year he had earned enough to buy himself a bicycle and a mobile phone.

The year 2014 presented a new opportunity - he was requested to teach in the smart classes organized by Parivar Vikas. These smart classes consist of students from all walks of life from all over Jamui. This was also the time when he faced competition from local tutors who forced students into leaving his classes. The private tuitions that were taking away students on the basis of false facts ultimately failed. Many students have a poor economic background and as such, they cannot pay the tuition fees. Anil came up with an amazing system - to not only take monetary value for his service but also to take their services in return. For example, if a student is unable to pay the fees, he can study on credit and later on when the need is required, his/ her parents can work on Anil's fields without payment. He also introduced a system where the one-time payment was less than a monthly payment. The fees per month was 300. So the yearly fees come to 3600. Instead of 3600, they just have to pay 2500. Currently, he has 150 students.

Apart from this, he has his own business. He owns a shop where he has a range of products - starting from stationary to grocery. But as expected, he is not the only shop in the village. He has many competitors. To stay on top of his game, he adopts many strategies.

- He keeps a wide product range to offer his customers with many choices.

- He provides discounts of 5 to 10 percent to regular customers. This way he offers them excellent service and they don't move to another shop. Sometimes he gives a discount of more than 10 percent depending on the quantity of the purchase made.
- He keeps track of his products. He restocks as soon as possible so that a customer is never disappointed.
- He also sells DAP. DAP stands for Diammonium phosphate. It is a water soluble chemical fertilizer used as a source of Nitrogen and Phosphorus in agriculture, thus providing nutrition to the plants. Initially, he only managed to sell 1 or 2 kg per month but that was because he was selling at the market rate. He then reduced the price and now he is able to sell 40 to 50 kg per month. He also keeps stock of his product and is never out of stock.

The vast land in Kudila village is full of rocks. Agriculture is not possible without leveling it. Anil owns 5 acres of land out of which 2 acres are disputed land. He practices agriculture on 3 acres. He makes sure that there is no fallow period. He grows Paddy, followed by wheat and then pulses. Pulses help improve the productivity of the land. The other major problem is irrigation. He bought a motor for Rs. 20000 to irrigate his fields. A bore well was already dug by his father. He also understands that chemical fertilizers harm land in the long run hence he tries to use them as less as possible. He uses household compost and Farm Yard Manure (FYM) in his fields. He uses DDT as an insecticide in his fields but not in large amounts. He also grows vegetables on 0.2 acres for his own sustenance. He also inspired two of his fellow farmers to level their land and invest 10,000 rupees to help level a total of 1.5 acres of their land. He took 1 acre from Mr. Jhaman Shah and 0.5 acres from Mr. Ashok Yadav. In return, he asked for 25 percent of their produce. Both readily agreed to the terms. Anil is paying the leveling cost in installments. He paid 1000 rupees in the form of Products. He has yet to pay 3000 rupees.

Response

Parivar Vikas, which is an NGO in Bihar working towards

improving the education and livelihoods of rural children and women, also helped the villagers to set up Guava and Mango orchard. They understand the importance of horticulture. They identified and recognized his dedication towards education and offered him a job in 2014. He was paid 5000 rupees back then. Now he is a member of Parivar Vikas. People have started to understand the value of education. They also have understood that a job is not everything and they can start their own venture. Anil is respected by the village youth because of his education and his desire to make the village better. The youth are inspired by him and see him as their ideal. For any career advice, they approach Anil.

Action Taken

Anil has always put the village welfare in his mind first. This has subsequently brought in a good response from the villagers, especially the youth. They are driven to take action against the bad quality of food in the middle school of Kudila village. The rice served was of bad quality and the Dal was watery. Anil complained to the headmaster about it but no action was taken. He investigated and found out that the school was making a lot of money in the name of fake students enrolled for a mid-day meal. He discussed that with the authorities about that. But to no avail. Finally, he used the influence he had over the youth to address this issue. Anil with a bunch of youngsters made about 100 posters about this issue and pasted them all over the village. He also educated the villagers about the importance of good nutrition for their children. Such drastic action and support from especially the youth of the village finally resulted in the improvement of the quality of mid-day meals. The people are also more inclined towards education – sending and encouraging their children to study.

The guava fruits from the orchard kept falling on the ground and were consumed by the animals. Many fruits were wasted. The villagers were least bothered about it. Anil with the help of his Youth 'tolly' - collected all the fallen fruits and distributed them equally among the villagers. Parivar Vikas was impressed by him and he was given the responsibility of the mango orchard. The

mango orchard was properly managed by him and it gave a total yield of 25 quintals with a profit of Rs. 3500 per quintal. A total of 87,500 rupees profit was earned out of which 30,000 were given to Anil. Anil kept 10,000 rupees for himself and invested the rest in community development projects such as temple construction, tube well construction, etc.

Questions for Discussion

1. How do you think the education of one individual helps to mold a village community?
2. What is the role of a barter system in a village economy?
3. What is the role of youth in fighting corruption?

Lessons Learnt

1. Youth revolution can bring about many changes in society. Alone an individual is powerless but unity is strength. If youth are passionate, energetic and make up their minds to tackle an issue, with proper guidance, a lot can be achieved.

2. Education is important. It plays an important role in molding an individual's personality. It gets him respect from others and lends him credibility. These go a long way in any community. Education also inspires an individual to spread his knowledge and bring about changes to his society.

3. Market knowledge gained from exposure to markets situated outside one's own state and from experience gives an edge over one's competitors. It provides knowledge of a better and efficient marketing system. It also provides benefits both to the seller and buyer.

Course Positioning

We can link this case to rural marketing strategies.

Anil Kumar Yadav was able to successfully understand consumer behavior and choose his product line accordingly. He keeps a stock of what products sell and

what they do not. He also provides education services. His system of taking payment is also innovative. He identified that people do not always have money to pay and they are attracted to discounts. He therefore introduced -

1. Discounts
2. Barter system
3. Payment by installments - either in cash or in kind.

His promotion strategy is purely through word of mouth. His biggest strength is the trust and credibility that the villagers, especially the youth have on him. He has positioned himself as a trustworthy person - from whom no one ever returns empty-handed. We can say Anil is a brand in him.

Conclusion

With the trend of migrating to urban areas, Anil came back to his birthplace and tried to make his living with the acquired knowledge he gained to date. This case particularly will inspire the rural youth not to migrate out in search of labor jobs rather increase their bookish knowledge and apply it for earning. There is a saying in the Bible - "He who cannot pick up an Ant, and wants to pick up an elephant will someday see his folly", which means when you have high goals you cannot afford being lazy.

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Annexures

Table 1			Total
Population	789 (Male)	634 (Female)	1423
Area	150 hectares		
OBC	1000		
SC	423		
Child sex	358 (Boy)	254 (Girl)	612
Literacy	64% (approx.)		

Table 2	Male	Female	Total
Class 1 to 8	138	124	262
Class 9 to 11	90	60	150
Other	130	70	200
Voters	431	380	811
	634	789	1423

Both the tables have been created on the basis of data provided by Mr. Vikram Kumar who is the Block Level Officer (B.L.O.) and also Block teacher of that area.



Anil Kumar Yadav in his Special coaching centre at Parivar Vikas's Chandrashekhar Nagar Campus



SHG meeting at Kudila village



Anil ji's mother with her grandchildren making beedi in her leisure time



Anil Ji using his paddy separation machine after his harvest



B.R.C office at Girdhaur, Jamui, Bihar

The Study of the Exploitation of Bandhej Workers

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Introduction to the Village

Ghaduli, is a village in the Lakhpatt Taluka of Kachchh District which is one of the biggest districts of India. Ghaduli is located at about 115 km from Bhuj downwards south and 7 kms from Dayapar- the biggest village in the area. Ghaduli, is a significantly larger village in the area after Dayapar. Ghaduli has a population of 1664 out of which 665 are females and 878 males. In total there are eight communities that reside in Ghaduli namely Suthars, Patels, Muslims, Kolis, Rabaris, Brahmins, Maheshwaris and the Thakkars. The village has all the necessary facilities of Anganwadis, Primary school, Secondary school and Primary Health Centre. This the last border village that has a market and everything is available easily, beyond this village, there isn't really anything other than sparse settlements. The transportation facilities are also quite frequent from Ghaduli towards Bhuj which is not true for the other interior border villages. Although being a border village and having a significant number of Mohammedans as well as Hindus, all the people of the village coexist very peacefully. There has been no record of any kind of Hindu-Muslim violence since ages.

Even though they have all the facilities still the concept of education for them is not one of their primary concerns. They are not being able to break out the cycle of illiteracy because through generations at end, they have not made the full use of education. That is how they never got to experience the return over the years that education would have provided to them. The literacy and awareness level are very low amongst residents of the village. They're content with how they live and possess and are very unwilling to risk traditional sources of livelihoods for a better future.

Identification of the Problem

Bandhej is the art of tying fabric so that it can be dyed and created patterns out of fine fabrics. The women in the Mohammedan community of Ghaduli, stay at home

tying fabric as artisans of the craft of Bandhej. This is an important and subsidiary source of livelihood for them since they are not allowed to go out and work for a living. The problem here lies in the fact that the women who toil endlessly all day tying a saree or odhani/dupatta for over a period of month and in some cases even more, get very minimum wages for their work. The artisanship of tying and dyeing is a well-known one and can use research. This would better the conditions of these artisans, especially the ones who have been trapped in the vicious circle of poverty. Along with the awareness of government schemes and the capacity building of women, we also need to focus on helping them to break-free from the existing system and market their products.

Review of the Literature

The Handicraft industry is and has been a major source of livelihood for the rural communities and employs a large population. It is the women who are mainly employed in this sector, as it becomes a source of subsidiary income for them (Shah & Patel, 2018, p.2). Most of these craftsmen or artisans are those who live below the poverty line because of the high exploitation done by the middlemen. Very few organizations have business models focusing on both profitability and social impact (Tiwari, Aditi and Dutta, Bedanta p.2). Handicrafts is an unorganized sector running in small units where there is no organized identity at the individual level. There are very few organisations who follow the business model of profitability and social impact hand in hand. The marginalized are nowhere included in the business process of supply chain as producers. Basically, to say that the majority of the businesses which facilitate the artisanship are not inclusive. Business inclusion is a specifically important aspect from the viewpoint of the poor. It means creation of jobs and opportunity to increase income levels, access to essential goods and services, meeting basic needs, higher productivity, sustainable earnings and greater empowerment (Tiwari, Aditi and Dutta, Bedanta p.7, 2013).

Another important perspective that came up, was the inability to sustain their products with competing machine-made goods. The artisans face miserable socioeconomic conditions and are forced to leave their traditional skilled occupations and search for the alternative livelihood (Majeed, 2018, p.5). Machine made and mass production of crafts has lowered the demand for the authentic handmade textiles. For example, the Chinese craft producers produce competitive machine-made crafts that are less expensive than the high-quality crafts. Most of the artisans engaged in the handicraft sector are from economically backward sections and suffer greatly from a lack of access to credit and loan facilities. The education level of these artisans is also very low which leaves them with not many alternative options of understanding government schemes or bargaining prices with the middlemen.

Bhattacharya, (1980) mentioned that there is an immediate need for the organization of cooperative societies on a sound footing, so that the artisans give a lead in the manufacture of quality and standard products. Such societies can make the artisans of the study area cooperative minded. One of the papers also suggests laying emphasis on crafts tourism as travellers or tourists like to take back home the memories of the friends and relatives. This provides the impetus for the emergence and development of local craft centres and souvenir shops in almost all places of tourist interest around the world (Dey & Malhotra, 2011, p.9). The main bottlenecks that the rural producers have in the market are transportation, poor market knowledge, market linkages, after sales services and financial assistance. It is because of these reasons that the rural producers and suppliers are struggling to market their products.

Objectives of the Study

The primary focus of the study aims towards understanding the following: -

- To study the livelihood of the women of the Mohammedan community
- To understand the causes of exploitation of the artisans

- To examine the success of a new business model, if established
- To suggest measures to create an exploitation free sustainable business model
- To study the existing status and the functioning of the business units

Brief Description of the Study (Research Design)

To achieve the purpose of this study/research

1. The data collection part, qualitative and quantitative has been done through primary sources, which include- primary household surveys, personal interviews and focused group discussions.
2. The sample size taken for the purpose of this study was 50.
3. The process of the study was in the order of building a relationship with the community by asking them some basic questions about their lifestyle and livelihoods.
4. A lot of discussions were done with various people in the community engaged in the same livelihood and then the responses given by each were triangulated.
5. One- on-one discussions were done with the Sarpanch and the Gram Panchayat members to double check and identify misinformation.

Story Line

Challenge

It was just another day for Kumbhar Rabiabai Osman and her two young daughters when one reaches their house while searching for Rabiabai who also happens to be a member of the Gram Panchayat. Kataobhai, another fellow Gram Panchayat member of Rabiabai in Ghaduli had directed researcher towards her. At first, Rabiabai in her late 30's, mother of four children, seemed to be pretty hostile with the arrival of a stranger at her house. Rabiaben was the point of contact for the purpose of study. She would be the best person to gain insight and to reach around to the other households. As, holding true, she helped with the purpose of study and in building a cordial relationship with the community.

Initially, when one first enters the household of Rabiabai, one would notice her daughters, other women from the neighboring households and she. They were busy in tying cloth. On probing a little further, it was found out that Ruksana, (21) and Rehana (18) the two daughters and Rabiabai herself (all the women of the household) were engaged in the work of tying cloth in different patterns. This whole process of tying cloth very minutely to create patterns and then dyeing it is known as Bandhej.

Bandhej is a traditional type of tie and dye textile, very popular in the state of Gujarat and Rajasthan. Traditionally, the art of Bandhani involves dyeing the fabric, which is closely bound by a thread in several areas to produce different patterns. The fabric that is tied and dyed can be turned into various clothing pieces, most popularly in sarees and dupattas. Bandhani patterns are adorned, not only by women but also by men in the form of colorful turbans. The art of Bandhani is one that requires high skill and technique which cannot be duplicated by many.

Rabiabai along with her daughters and the women of her community belong to the Mohammedan community. The women are not allowed to go out and earn for a living. So, to support their families financially, these women work from home as artisans who do the work of tying the fabric.

Ruksana says that they are given a stamped or marked fabric which can be a saree or a dupatta by the 'seth'. The fabric is then marked at places in patterns and tied in a very detailed manner. When the tying of the fabric is done, it is collected back by the 'seth' to get it dyed after which the final product is marketed.

As told by Ruksana and Rehana in agreement about the amount of time taken by one person to tie a fabric of 6-7 yards is around forty-five days. The wage that they earn by tying 6-7 yards of fabric in forty-five days is just roughly around three to four thousand.

The daily income of these ladies roughly calculates to INR 80-100.

The same product which Rabiabai and her community

members tie and get paid INR 300 for is marketed and sold in the retail shops as finished goods for around INR twenty-five to thirty thousand. This calculates to ten times the wages being paid to these women. The Patidars are the dominant community in the area in terms of well-being and it is them who are the 'seths'. These businessmen exploit these women workers and take advantage of them as they are very less informed and barely literate.

When inquired to the women as to why they do not get involved the after- process of dyeing the fabric as well, which would help them earn more money as well. They said that they only do as instructed to them. They are not allowed to do anything more than tying than cloth in patterns.

When suggested alternative ways in which they already had the skill and all they would have to do to earn better for what they deserve. They were skeptical about it and said that starting something of their own and doing everything would require a lot of brains and efforts which they were not confident in doing so.

While, they also acknowledge the fact that they are being exploited and given very less wages for the kind of skilled work they do.

Rabiabai is hardly a 5th pass, while her daughters have studied till matriculation and then taken upon the Bandhej work along with their mother to help bring in more money in the family income.

Response

Basic quality education is something which according to the Sustainable Development Goals should be a right. Sadly, leave alone quality but basic compulsory and free education up to the age of 14 is also a luxury for the residents of the villages. The children studying in the 2nd grade haven't even learned to write down their names yet which shows how by the time they pass matriculation, all that they can do by the definition of a literate is pretty much narrowed down to being able to sign one's name.

Among the adults along with the lack of education, there is a huge gap in the level of awareness of the Patidars and the other communities living in the same area. These women work so hard day and night to complete tying the fabric and doing nothing much other than eating and sleeping. The fruit of their hard work is paid in INR 100 per day which is an abuse to their skill.

In more than fifty percent of the women working as bandhej workers, they did not have any information about the work being done after and before the process of tying the fabric.

In spite of all the government schemes and support initiatives, still the women would go for the easier and less risky way out rather than taking a stand for themselves and their community members, while breaking away from the vicious cycle of exploitation.

We need to focus on the awareness and education of these women first, so that they can understand the amount of harm exploitation is causing to them. They need to be educated about their rights as well as the various government schemes they can derive benefits and seek help from. Most importantly, these women need to be empowered and made confident. They need to be made to believe in themselves, so that they can actually really come forward and take a step for themselves and their community.

The only problem that arises here is the alarming increase in the printed versions of the handcrafted ones. These versions are machine-made and quite cheaper than the handcrafted ones. Now, the segment of buyers who wants to have the cake as well as pay less always goes for the machine-made goods. Sadly, we have people of this kind more in number. While, there is a surprisingly huge international demand and market for the handloom items.

Action Taken

Firstly, we need to make these women aware about the sensitivity of price in the market and how they are letting go such a precious skill of theirs which deserves commendation. Once, they know about the value of

their skill in the domestic and international markets then it would be easy to convince them to break away from the employment under the 'seth'.

Secondly, it is also advised that these women be educated about the various schemes floated by the government for women entrepreneurs, rural entrepreneurs and small scale or micro entrepreneurs. Once, they know about the assistance they can avail from the government they would be more than willing to be their own 'seth' rather than working for and exploitative one.

Once women like these are educated, it is very important that we educate the men of the family too. Since, as known through the household survey the men of house either work as agricultural labourers or non-agricultural labour and at times off-season they do some odd jobs like driving and loading-unloading. Also, these families do not own even a single piece of cultivation land.

In spite of working as labourers for others, they can establish a business on their own as they already have the skill possessed by the women of the house. They can take assistance from the government for the initial establishment of the business through which they can source their own fabric and then tie-dye it and sell it in the retail price. Through this way the actual deserving skilled people will earn all the profit by only paying for the cost of the materials and goods used.

The main issue that stops these people from pursuing this path is their lack of awareness of the demand of such handmade goods in the domestic as well as international markets. They also do not have market linkages through which they can establish a place for themselves in the market. To solve this, what can be done that the assistance can be taken from the government to market their goods in the initial stages and then continue doing so on their own once a drift is caught.

Another thing which can be done is that they can be connected to big retail outlets and big brands with the help from an NGO or such so that they can establish a market presence through them.

Questions for Discussion

1. What steps can be taken to educate these women about their rights?
2. What can be done to convince these women to break away from their masters and be on their own?
3. How can these women be convinced to use their skill in a better way that would help them earn more?
4. Can these women be convinced in changing themselves from skilled labourers to businesswomen?
5. How can we ensure the market linkage of these businesses if formed?
6. How can they be educated about the extensive and intricate knowledge about the market demand and supply?
7. How can the uneducated people be taught about the domestic and international market for the goods that they produce?
8. How can they build that trust in the market area so that they can be sustainable and compete with the machine-made goods?

Lessons Learnt

One should never undermine one's skills and qualities and never accept to be underpaid for it. Through this case study we learn how important it is to know the value of our skills and use in the right direction in such a way so that we can derive the maximum return from it.

The awareness quotient is very important in our lives, especially now when the government has so many schemes aimed towards uplifting the marginalized and the exploited. There is no doubt about the increased level of well-being awareness of the people but what lies deep-rooted in the cause of it are the boundaries created by the rules of the society.

Lack of education and proper awareness about the market, prices, wage rates and government assistance make a person vulnerable to exploitation.

A person can never let himself agree to get exploited, if

he/she would know their worth and would not ever compromise for less.

Course Positioning

The case study can be very appropriate in the teaching of the Rural Productions Systems as well as the Managerial Analysis case. It would be really helpful in knowing about the working of the secondary livelihood opportunities in rural areas. It would also give a very raw and unfiltered picture about the working of handloom and craftsmanship in the context of the rural artisans and their experiences.

This case study can also be studied in the course of Managerial Analysis because the course provides an introduction to managerial analysis. It enables them in developing the ability to understand complex managerial problems and analyze them. The course intends to equip the students with rigorous means of problem analysis and problem solving as well. The course would cover case analysis to prepare the students for dealing with complex business communication tasks.

Conclusion

In conclusion to the case study discussed and explained above, the most important findings that came out were-

- The importance of awareness and knowledge of the market in the grassroot levels.
- The importance of the empowerment of the rural artisans to help better their situation in terms of livelihood.
- The importance of effective utilization of the rare skill that these rural artisans possess.
- The importance for the immediate need of organization cooperative societies on a sound footing.

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Photos



The Study of Village Godaro ka Sara

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Introduction to the Village

Godaro ka Sara is a small revenue village under the Sanpa Manjhi Gram Panchayat. It is located in Baytoo tehsil of Barmer District coming under the Jodhpur division of Rajasthan, India. It is about 46 Kms from the sub-district headquarter Baytoo and 48 kms from the district headquarter Barmer. It is a remote revenue village located in the Thar desert region of Rajasthan and the only way to reach there is to travel by road. The nearest railway station to the village is Baytoo. Although there is a road connecting Sanpa Manjhi to the state highway, there are no roads connecting the outer road to the village.

The nearest market to the Village is located in Sanpa Manjhi which is approximately 2 km from the village. While the nearest City to the village is Barmer where people of the village mainly travel for selling their crops or to buy products in bulk.

According to the Census data of 2011, the population of the village is about 896 with 132 households in total. Hinduism is the dominant religion in the village. The common language spoken by everyone in the village is Rajasthani. Hindi is also spoken by some of the families but Rajasthani language is more dominant in the village.

Identification of the Problem

Government schemes are the reliability of the village as the major problem that the people of the village face are unemployment. Majorly all the income that is generated in the village is through agriculture and casual labour. People from the village produce agricultural crops like Bajra, Moong, Moth in during the Kharif season (July-October) and migrate to Balotra City to work in Textile industries during the non-agricultural season. In these conditions, the villagers expect the government to provide them schemes which help them earn income and other facilities. One of the major

schemes that are provided in the village are Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). Although these schemes are available to be accessed, there is a difficulty of unawareness about these schemes in the people. Most of the families, as surveyed have stated that they do not get any benefits of these schemes.

Review of the Literature

The concern that affects most of the people of the village of Godaro ka Sara is about the unawareness about the existing Central and State Government Schemes. Although the government has allocated budgets in these schemes through their rural development plans, the problem arises in spreading awareness about these schemes to the target people.

MGNREGA is the biggest and most funded project (in terms of budget allocation) launched in the year 2006. This act ensures 100 days of guaranteed wage employment to any abled person. In case of Godaron ka Sara where people mainly rely on agriculture for their sustenance, there are limited employment opportunities for the people. The people (generally Men) of the village migrate to a city in search of work which provides them work for a few months. As their family is left behind in the village, they cannot migrate permanently in the city to live. This seasonal migration offers them employment only for 2 to 3 months which gives them minimum financial support to the people who can migrate to cities in search of work. While there are many families who cannot migrate to cities in search of work and are suffering because of unemployment. Availing the benefits of MGNREGA is not something that is familiar with the families of the village. People are unaware about this Act and do not know how and whom to approach to seek wage employment. Awareness about MGNREGA is not there amongst the people. Another problem arises in availing the benefits is of not getting a receipt after applying for wage

employment. As a receipt is not provided to the beneficiary after applying for MGNREGA, there is not proof for applying it and hence the benefits are denied to the beneficiary.

This case let is focused on the story of the village where a citizen leader helped some families avail the benefits of MGNREGA by guiding them through the proper process of MGNREGA which showcases that with proper awareness of the process, people can avail all the benefits of the government.

Objectives of the Study

The objective of this case let is to spread awareness about the proper processes and information about Government Schemes/Act.

Research Design

The required data is collected from both primary and secondary data sources.

Primary data was collected through direct interaction with the villagers while conducting household surveys, focused group discussion, informal interviews and non-participatory observations.

Secondary Data is collected from Census Data available in the internet. The references of data collected from the internet have been mentioned towards the end of the case let.

Story Line

Challenge

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is one of the major Act/Scheme of the government of India which aims to benefit the people living in rural India by providing them with guaranteed employment for 100 days. While the government is working towards its implication, there are many people living in the rural areas of India who are yet to receive the benefits of the scheme/act.

The unawareness about the benefits of MGNREGA and how to avail them rendered many families in the village unemployed. The MGNREGA has many criterias for its application and a number of processes which are very complicated for a person to understand and follow without any education. In the village of Godaron ka Sara where the literacy rate of people is around 58.38%, the processes and guidelines for applying the Form 6 becomes difficult. Employment opportunities in the village is also very scarce which would bring income to the families living in the village. Due to lack of employment after the agricultural period, the families were left vulnerable in case of financial needs. The challenge here is to make people aware about the benefits of MGNREGA and guide them through a proper process so that they can apply for waged employment through it. This would help them gain financial support during the off season where there are no agricultural practices carried on in the village.

Response

Mularam Bhatia is the citizen leader of the village of Godaron ka Sara. He has been an active member in the village who helps people in the village in times of need. Mularam Bhatia has been indirectly associated with various NGOs in the region who are working towards the development of Rural areas in Rajasthan. Having worked in social field for about 15 years, Mularam Bhatia has insight about various government schemes that both the state and central government have implemented. A common problem arose in the village when the villagers found themselves having difficulty in applying the form for MGNREGA. Since Mr. Mularam Bhatia was actively involved in working towards the welfare of the people in the village, he along with 15 other women went to the Gram Panchayat of the village to ask their right to work.

Action Taken

On April 2019, Mularam Bhatia along with 15 female members of his village went to the Gram Panchayat of Sanpa Manjhi to apply for waged employment under the MGNREGA and demanded a receipt for the same. Earlier when the villagers used to apply for MGNREGA

in the panchayat office, they were not given a receipt for their application. This used to create a problem as when the beneficiary went back to the panchayat office after 15 days to demand for work, they were denied stating no proof of filed application. This time, with strong determination by the group of women and the awareness about the receipt of application, they were given receipts for the application form they filed (Form 6).

After 15 days, the women returned to the panchayat office only to find out that there was no employment. Mularam Bhatia along with the rest of the women went to the Sarpanch to demand unemployment wages for not providing employment. On producing the receipt for application filed, they couldn't be denied their unemployment wage. This assured an unemployment wage of INR 192 per day until 100 days to all the women who had applied for employment. Since that day, the people in the village got the idea that with proper knowledge and by following the correct procedures, all government facilities can be availed. The success of this small movement by the women of the village created an awareness amongst the people in the village.

Questions for Discussion

1. How can the success of government schemes be measured?
2. How alternative sources of employment can be generated?
3. Is awareness of government schemes more important than its implementation?
4. How can it be assured that the beneficiaries of a government scheme are satisfied with the aforementioned schemes?

Lessons Learnt

- The awareness about government schemes is necessary as without it, the targeted people cannot avail them. Without proper awareness about the schemes, people are unaware of its benefits and how to avail them which makes the

efforts of the government non deliverable to the targeted people

- In case of denial of rights, they can be demanded in a systematic way i.e. by following the proper procedures, rights can be guaranteed.

Course Positioning

The following case study is well suited to be included in Micro and Participatory Planning and Development Administration and Policies. The case is about knowing about the various government schemes which can be included in Micro and Participatory Planning while the administration of the Schemes requires a knowledge on the responsible authorities and government bodies who implement them.

Conclusion

This case let was based upon the problem of unemployment that the village faces and the solution to the problem through government schemes. How awareness about a government scheme makes the difference in the effectiveness of the schemes. The importance of knowing the details of the scheme can help avail all the benefits by the beneficiary. The problem in the village used to be about awareness but since after the efforts made by Mularam Bhatia in generating awareness by making the women participate in the process has created a change in the mindset of the people and has shown to them that by following procedures, rights can be guaranteed.

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Annexure

Household Survey Questionnaire

II. Household characteristics

1. Background of the household members:

Code Sheet		
7.2. Sex	7.5. Children studying in (Child Age between 6 to 14 years)	7.6, 7.7, 7.8
1 - Male	1 - Private School	1 - Yes
2 - Female	2 - Government School	2 - No
3 - Other	3 - Not in School	

7.1. Name of the household members	7.2. Sex (M/F)	7.3. Age (in years)	7.4. Education	7.5. Children studying (For Age - 6 to 14). Mention NS if not studying & mention standard if studying	7.6. Are you a Bank Account holder?	7.7. Do you have Job Card?	7.8. Do you have Aadhar?

2. Household head:

1 - Male headed; 2 - Female headed

3. Type of family as per members staying in:

1 - Joint Family (if not nuclear); 2 - Nuclear Family (parents and their unmarried children)

4. Religion:

1 - Hindu; 2 - Muslim; 3 - Christian; 4 - Sikh; 5- Buddhist; 6- Jain; 7- Tribal; 8- Others; 9 - None.

5. Social Category of the respondent:

1 - General; 2 - OBC; 3 - SC; 4 - ST

6. Migration status of household:

1- Migrant household (if the household members not staying in the same household, where survey is being done, for the past one year), 2- Non-migrant household (if not 1).

7. Any member of the household staying away (out-migrant) from household?

1- Yes, 2- No.

8. Any member of the household staying away earlier, but joined this household recently?

1- Yes, 2- No.

9. If yes in 11, then the details of out-migration, else skip this:

Name	Age	Sex	Type	Reasons

Type:

1- Short term migration (any member away between one and six months in the previous year)

2- Long term: permanent relocation.

3- Long-term circular: migrants with families left-behind.

Reasons: 1- Job/Work/Employment; 2- Business; 3- Education; 4- Marriage; 5- Others (please mention like moved after birth, moved with household or any other reason mentioned).

10. Number of working women in the household:

Note: Women whose occupation mentioned within the options of primary occupation. To find working women: working men ratio

11. Number of working men in the household:

12. Are you a Public Distribution System (PDS) member?

1 - Yes, 2 - No

13. Did you avail PDS services anytime in the past one year?

1 - Yes, 2 - No

III. Income, expenses & livelihoods of household

14. Primary Occupation of the household:

Note 1: Mark the income generating occupation and the yearly income generated. Help with the calculation if/when there is a difficulty in calculating the income.

- a. Agriculture -
- b. Collection of NTFP -
- c. Agriculture Labour -
- d. Non-Agri Labour -
- e. Business -
- f. Weaving and Artisanhip -
- g. Livestock Rearing -
- h. Government Job -
- i. Private Job -
- j. Others -
- i. Do Mention -

15. Secondary Occupation:

Note 1: Mark only the second highest income generating occupation and the yearly income generated. Help with the calculation if/when there is a difficulty in calculating the income.

- a. Agriculture -
- b. Collection of NTFP -

c. Agriculture Labour -

d. Non-Agri Labour -

e. Business -

f. Weaving and Artisanship -

g. Livestock Rearing -

h. Government Job -

i. Private Job -

j. Others -

i. Do Mention -

16. Total yearly Income of the household (in INR):

17. Total yearly Expense of the household (in INR):

Note: Use your discretion to calculate the total income and expense by using the information provided in 13 and 14, plus any other source of income that the respondent shares with you (e.g. remittances from migrant members of household). Cross-check your calculation with the respondent.

18. Average monthly expense in food (in INR)?

19. Average monthly expense in health (in INR)?

20. Average monthly expense in education (in INR)?

21. How many members in your family between the age 18 to 55 are unemployed?

22. Mention the employable Skills and Art skills known by the members of the household (textual response?)

IV. Agriculture and allied activities

23. Access to farmland:

1 - Owned, 2 - Leased, 3 - Shared, 4 - No access to farmland

24. Land holding (convert from local units in acres):

	Dryland	Irrigated	Total
Own land			
Leased-in/shared-in			
Leased-out/shared-out			

25. Highest Produced Crop:

1 - Fiber Crops, 2 - Legumes and Pulses, 3 - Maize or Corn, 4 - Millet, 5 - Other Cash Crops, 6 - Paddy and Wheat, 7 - Plantation Crops, 8 - Spices, 9 - Vegetables and Fruits, 10 - Not Applicable

26. Land Area in acres for the highest produced crop mentioned:

27. Mention the Available Irrigation facility?

28. Livestock (in numbers)

1	2	3	4	5	6	7
Bullocks	Cows	Buffaloes	Goats and Sheep's	Poultry	Pigs	Others

29. Average (number of days/month) slept with 1 meal a day or less:

Note: For the time period of last 1 year

V. Household & access to services

30. Type of house:

1 - Pucca (walls made of: burnt bricks, stones (packed with lime or cement), cement concrete, timber etc. & roof made of: tiles, GCI (Galvanized Corrugated Iron) sheets, asbestos cement sheet, R (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc.)

2 - Semi-Pucca (walls made up of pucca material, but roof made up of the material other than those used for pucca house)

3 - Kuccha (made of material other than mentioned above e.g., un-burnt bricks, bamboos, mud, grass reeds, thatch, loosely packed stones, etc. are treated as kutchcha house)

31. Mention the important assets owned by the household:

Note: Mention only the assets the household sees necessary, i.e. self-reported assets

Sl. No	Name of the Asset	No. of. Assets

32. Is there a toilet constructed within your house?

1 - Yes, 2 - No

Note: By construction

33. Access to toilet:

1 - Independent Latrine, 2 - Community Latrine, 3 - Open Defecation

Note: By Behavior

34. Household by toilet availability:

1 - Closed Drainage, 2 - Open Drainage, 3 - No Drainage

35. Drinking-Water Source:

1 - Safely Managed (Drinking water from an improved water source located on-premises, Available when needed and free of faecal and priority contamination)

2 - Basic (Drinking water from an improved water source, provided collection time is not more than 30 minutes for a round trip, including queuing)

3 - Limited (Drinking water from an improved water source, provided collection time is more than 30 minutes for a round trip, including queuing)

4 - Unimproved (Drinking water from an unprotected dug well or unprotected spring)

5 - Surface Water (Drinking water directly from a river, dam, lake, pond, stream, canal, or irrigation channel)

Note: Improved Water Source Means Piped water, boreholes or tube well, protected dug wells, protected springs, rainwater, packaged drinking water or delivered water.

36. Is the house connected with electricity?

1 - Yes, 2 - No

37. How many hours of power cut experienced in a day on an average?

38. Is there any alternative source of energy? Do Mention the capacity in kwatts, if yes:

1 - Yes, 2 - No

39. How do you dispose the waste (enter the response as text)?

40. Do you use LPG?

1 - Yes, 2 - No

41. Do you have a bank account?

1 - Yes, 2 -No

42. How do you access your bank account?

1 - Mobile app, 2 - ATM, 3 - Direct branch banking, 4 - Help from friends

43. Do you have a debt presently?

1 - Yes, 2 -No

Note: It could be a loan from a formal source or money taken from friends/family/relatives or any other non-formal, non-family source.

44. Type of debts

1 - Formal (All types of Banks, Cooperative Society, MFI, Small Finance Bank, SHG, All other formal sources)

2 - Informal (Money Lender, Friends/Relatives)

3 - Both

4 - Not taken

VI. Socio-Economic condition determinants (51, 52, 53)

45. 14 parameters of Automatic Exclusion:

1 - Yes (If any of the options ticked), 2 - No

Note 1: Tick the options below

Note 2: The questions 51,52 and 53 will determine whether the household is poor.

- a. Motorized 2/3/4 wheeler/fishing boat.
- b. Mechanized 3-4-wheeler agricultural equipment.
- c. Kisan credit card with credit limit of over Rs. 50,000/-.
- d. Household member government employee.
- e. Households with non-agricultural enterprises registered with the government.

- f. Any member of the household earning more than Rs. 10,000 per month.
- g. Paying income tax.
- h. Paying professional tax.
- i. 3 or more rooms with pucca walls and roof.
- j. Owns a refrigerator.
- k. Owns a landline phone.
- l. Owns more than 2.5 acres of irrigated land with 1 irrigation equipment.
- m. 5 acres or more of irrigated land for two or more crop seasons.
- n. Owning at least 7.5 acres of land or more with at least one irrigation equipment

46. 5 parameters of Automatic inclusion:

1 - Yes (If any of the options ticked), 2 - No

Note: Tick the options below

- a. Households without shelter.
- b. Destitute, living on alms.
- c. Manual scavenger families.
- d. Primitive tribal groups.
- e. Legally released bonded labor.

47. Deprivation Indication:

Note: Enter the number of options being ticked below i.e. if a, c, e is chosen, then the value to be mentioned above is 3

- a. Households with only one room, kucha walls, and roof
- b. No adult member between the ages of 16 and 59
- c. Female-headed households with no adult member between 16 and 59
- d. Households with disabled member and no able-bodied adult member
- e. SC/ST households
- f. Household with no literate adult above 25 years
- g. Landless household deriving most of their income from manual casual labor

VII. Village governance and public services

48. Is the Sarpanch active in solving village issues?

1 - Not Satisfied, 2 - Slightly Satisfied, 3 - Moderately Satisfied, 4 - Very Satisfied, 5 - Extremely Satisfied

Specify whether male or female sarpanch in this box by entering M or F

49. Has the functioning of gram panchayat improved over the last 5 years?

1 - Not Satisfied, 2 - Slightly Satisfied, 3 - Moderately Satisfied, 4 - Very Satisfied, 5 - Extremely Satisfied

50. Do you participate in the activities/proceedings of Gram Sabha?

1 - Yes, 2 - No

51. Is the gram panchayat useful to you?

1 - Not Satisfied, 2 - Slightly Satisfied, 3 - Moderately Satisfied, 4 - Very Satisfied, 5 - Extremely Satisfied

52. Do you get desired facilities from Primary Health Care / Community Health Care Centers?

1 - Yes, 2 - No

53. The work of Anganwadi staff is (for the respondent)

1 - Not Satisfied, 2 - Slightly Satisfied, 3 - Moderately Satisfied, 4 - Very Satisfied, 5 - Extremely Satisfied

54. The work of Accredited Social Health Activist (ASHA) staff is (for the respondent)

1 - Not Satisfied, 2 - Slightly Satisfied, 3 - Moderately Satisfied, 4 - Very Satisfied, 5 - Extremely Satisfied

VIII. Climate change, commons, subjective wellbeing

55. Has there been a change in rainfall pattern for the last few years?

1 - Yes-increased, 2 - Yes-decreased, 3-No change

56. Has there been a change in temperature pattern for the last few years?

1 – Yes-increased, 2 – Yes-decreased, 3-No change

57. Has there been a change in extreme weather events (like cyclone, heavy rainfall, excessive heat etc.) in the last few years?

1 – Yes-increased, 2 – Yes-decreased, 3-No change

58. Have any of the above changes (58,59,60) impacted your wellbeing negatively?

1 - Yes, 2 - No

59. Has access to natural commons (e.g., commonly accessed forests, grazing lands, water bodies etc.) been affected over the past 5 years?

1 - Increased, 2 - Decreased

60. On a scale of 1 to 10 where would you rate your household's wellbeing (1 means least or worst condition, and 10 means the best condition)?

Thank you for sharing your time with us!

Any comments by the surveyor:

The Study of Livestock Rearing in Musagadia Village

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Introduction to the Village

The district of Mayurbhanj, Odisha is enriched with lavish green vegetation, distinctive fauna and rich ancestral culture. It has a rich history, abundant mineral base, and is home to the Similipal Biosphere.

Musagadia is a small village in Badasahi Tehsil in Mayurbhanj District of Odisha State. The population of Musagadia village as per census 2011 is 908, of which 446 are males and 462 females. The population of children aged between 0-6 is 138. The Working Population of Musagadia village is 35.7% while the literacy rate is 61.3%, which includes 28.1% of females are literate, and 33.2% of males are literate. Musagadia's local language is Oriya majorly and Santali among the Schedule Tribes. Paddy cultivation and small scale horticulture is the primary source of livelihood. Also, villagers are dependent upon the natural resources available in the mineral-rich region.

Identification of the Problem

The organization, HDF-cDAR (Human Development Foundation-Centre for Development Action & Research), which works in the Mayurbhanj district, came across the problem in the village associated with livelihood and unemployment among the poverty-stricken community of the village. Through Science and innovation intervention, the organizations planned to take a fundamental role in improving the lives of people. The organization, after close observation and baseline survey, concluded that proper training would provide facilities to the villagers according to their interest in livestock rearing, they can bring a change in the lives of the beneficiaries. For the purpose, they came up with a plan to provide the villagers with improved quality of livestock, which are genetically modified, to targeted beneficiaries, in collaboration with the Department of Science & Technology. The project would be a source of secondary livelihood and help them attain additional income. Ultimately the objective is to create a healthy economic environment

along with adding nutritional value to the household.

Review of the Literature

Backyard Poultry Farming In India: A Call for Skill Upliftment (2015), in this research journal the authors conclude that poor and marginal farmers have limited assets and they depend on poultry farming for their livelihood and with government support, small scale poultry production can help reduce poverty and increase nutritional improvement especially in vulnerable groups.

Poultry and animal rearing will make a substantial contribution to household food security along with supplementing incomes. A significant rural population continues to practice backyard poultry as a supplementary source of income. The primary constraints in animal farming and development are inconsistent availability fodder, scares medical facilities, delay in detection of diseases, an outbreak of epidemics and incapability to control it and local breed being of inferior quality to yield higher profits, unavailability of veterinary doctor and lack of basic amenities provided by the household. The inadequate feeding in terms of quality and quantity due to limited or reduced availability of resources limits the productivity. The existence of the above limitation means there is a need for a small scale production system in which adequate attention to minor problems. The economic status of the villagers will be enhanced; only if a necessary corrective step is to be taken up by the community, which often breeds indigenous varieties to fetch higher prices. At present, the organization is focusing on backyard poultry and in near future transformation from backyard poultry to commercial poultry if the project sustains and prospers as desired.

Objectives of the Study

The primary objectives of the case study are:

1. To discuss about the promotion of Livelihood through micro-enterprise activity
2. To study the difficulties faced by the beneficiaries in the initial phase of initiation of the program
3. To learn about the different economic strategies that the villagers follow to feed the livestock to maximize the profit
4. To explore the possible barriers and to provide suggestions on improvement

Brief Description of the Study (Research Design)

Due to constraints of resources along with the preliminary nature of the project, which was implemented last year and covered 25 households, interviewers were among the beneficiaries. The interview provides a convenient benchmark for establishing a platform for the researcher and the subject of research. With the aim in mind of knowing the changes DST project has brought to the socio-economic background of Musagadia village, we interviewed the beneficiaries. The interview helped us in knowing the aspirations and perceptions of beneficiaries. The majority of the interviews conducted were open-ended in nature. Necessary information collected regarding the expenses bearded, income generated, difficulties faced while raising the chicks and kid, and whether they are satisfied with the projects.

Story Line

Challenge

Before the implementation of the project, the primary occupation of the villagers was dependent on paddy cultivation and agricultural laborer. The idea is to make the direct farmers producers of livestock and market it on their own instead of depending on local traders, which ultimately helped them to increase their income level and living standard.

Response

In the initial phase, 35 households received the

poultry or goat according to their desire. The beneficiaries with the remittances given to them provide shelter for livestock, medicine & vaccination facility, and basic training for livestock rearing. Within one year, the population of goats doubled. Ten households each had received two goats and one buck. Now the total number of goats has increased to 44 from 20 (actual number of goats given to the households), and each one will cost around 5000/- if sold in the market.

Similarly, the population of chickens has also shown a positive response. People are either selling the eggs or utilizing it for their consumption. Self-consuming eggs provide nutrition to the members of the household as well as improves the economic condition. Rashmi Patro, age 33 of Musagardia village says: "We are poor and needy people. When food prices in the market keep rising, we hardly have a choice to buy nutritious food for our children and the family." After eight months of managing chickens in her backyard, she now has many reasons to cheer. "Because I raise the chicks in my backyard, I am in a position now to add egg and meat to our plates and allow my child to grow well with adequate nutrition."

Action Taken

Backyard poultry and livestock rearing in this village involved country chicken birds and Bengal goat. These are genetically improved varieties of indigenous low-input technology birds and goats. These birds are resilient to different climatic conditions and capable of protecting themselves from predators. The organization assigned a field staff, Rekhya Murmu, who is responsible for the construction of a shed for the poultry, maintaining the vaccination chart, weekly visiting the households to check on the livestock. He also has a supporting staff, Labyan Patra (one of the beneficiaries from the same village) who keeps the stock of the poultry and helps the other beneficiaries with vaccination, and he is the link between the field staff and the beneficiaries. Labyan Patra, along with his wife, looks after the cleanliness and hygiene of the birds. There are three segments, one for the chicks, another for hens, and third for cocks. The bucks and

goats are also to be kept separate. Eight families recently received fresh livestock. Radhamani Dehury, age 34, had received five hens and two cocks last year, which have now multiplied to become seventeen. She is content with the facilities provided under the project but desires to get more number of stocks as she is unable to get any profit. She usually uses the eggs to feed her son, and is waiting for Makar Sankranti to sell of the remaining chickens. Her neighbor, Saraswati Jena, received two goats last year and is very gratified towards the organization. The population of her goats has reached five, and she even sold a goat for Rs. 5500.

Goat rearing at the household level with individual SC family:

- The family is provided with two local female goats.
- The family will construct a house with an elevated floor.
- One improved buck is given to five families.
- The goats will be vaccinated against PPR, POX, FMD, and ET.

Table: Investment on Goat Farming

Serial no.	Particular	Description	Amount
A	Fixed Cost		
1.	Housing of the Animal	100 sqft	7000
2.	Equipment	Feeder, drinker etc.	500
B	Sub Total		7500
C	Working Capital		
1.	Mother Goat	Local breed two nos. (Rs. 3500 each)	7000
2.	Buck	Improved breed	1500
3.	Feed, mineral lick, fodder	50 kg. Hybrid Napier & Azolla cultivation	675
4.	Medicine	Medicine & vaccine	400
5.	Demo classes on vaccination, de-worming & disease control, visit to veterinary hospital, goat farms & training manual, printed registers and booklets for documentation	Cost in organizing Demo classes	1000
6.	Insurance	5% of goat cost	425
D	Sub Total		11000
E	Total cost	B+D	18500
		Beneficiary contribution	(2500)
		DST Grant (cost of goats & shed)	16000

Backyard poultry rearing at household level:

- The family will establish a house of 50 square feet in the back yard and will rear 10-20 adult desi birds for egg production. All the eggs will be hatched keeping in mind notional cost.
- Birds will be reared under scavenging condition and supplementary will be given in the evening.

Table: Investment for Backyard Poultry Farming (10 nos. of poultry birds)

Serial no.	Particular	Description	Amount
A	Fixed Cost		
1.	Housing of the Bird	50 sqft	2500
B	Sub Total		2500
C	Working Capital		
1.	Desi birds	Indigenous local breed of 1 month	600
2.	Feed	Feed supplements like termite and feed mixed with dried fish	1000
3.	Medicine and vaccines	De-worming Medicine & vaccine	300
4.	Others	Litter, lime etc.	100
5.	Demo classes on vaccination, de-worming & disease control, visit to veterinary hospital, poultry farms & training manual, printed registers and booklets for documentation	Cost in organizing Demo classes	1000
D	Sub Total		3000
E	Total cost	B+D	5500
		Beneficiary contribution	(1000)
		DST Grant (cost of goats & shed)	4500

Questions for Discussion

1. Can this need based approach be intervened through right based approach for the betterment of the village as a whole?
2. In long term can this semi-intensive backyard livestock rearing be revered as commercial intensive with better market potential and growth?

Lessons Learnt

Free-range and small scale semi-commercial backyard poultry production is advantageous in this

particular village. This project can be seen as a tool for alleviation of rural poverty, eradication of malnutrition, and the creation of gainful employment in the upcoming years. Birds go around the backyard

scavenging on worms and insects. The requirement is of dealing in large scale production so that profit. The two major drawbacks in the project implementation are the lack of skill among the beneficiaries. Too much pressure on the birds while caging them. Improper care to protect them from the cold and harsh weather conditions. Beneficiaries do not sell the birds at the right opportunity as they wait for the rise in price during festivals like Makar Sankranti, thus leading to fibrous flesh in the animal and degradation in the quality. The beneficiary was satisfied with the Goats but was reluctant in the rearing of poultry. There is a need for regular field visits and engrossing the villagers by giving them proper education about animal husbandry through training programs and demo lectures. Adoption of the bottom-up approach in small scale poultry farming in back-yard will enhance the nutritional and economic status of the beneficiaries.

Course Positioning

Micro & Participatory Planning (MPP)

To develop an understanding of the needs and importance of decentralized planning as an instrument of decentralized governance. To provide knowledge about the characteristics of the micro plan and its advantages over the macro plan. To equip students with skills for preparing need-based and realistic micro plans in the framework of the macro plan. To sensitize students about people led micro plan (own, manage, and control by people) in bringing changes in the quality of lives of people. The different need-based and right based approached schemes for the upliftment of the underprivileged population of our country.

Rural Living and Learning Experience (RLLE)

Enable students to develop an analytical perspective about development processes and interventions,

generated is visible to the household.

facilitate students to explore and understand how programs of rural development, welfare schemes, business institutions, work with communities. Encourage students to reflect on the issues they observe and ideate on possible alternatives and develop an understanding of social realities leading to a definitive commitment for the welfare of people.

Conclusion

Backyard poultry and livestock farming are increasingly offering remote rural families both food and financial support. The idea of providing livestock in a village where human capital was untapped and was unable to utilize it due to lack of resources and knowledge is successful. They are satisfied with rearing goats more than poultry because there are higher margins in profits in selling goats. Although the beneficiaries possess massive potential for growth, the excessively large share of informal units raises doubts over the sustainability of such establishments.

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Photos



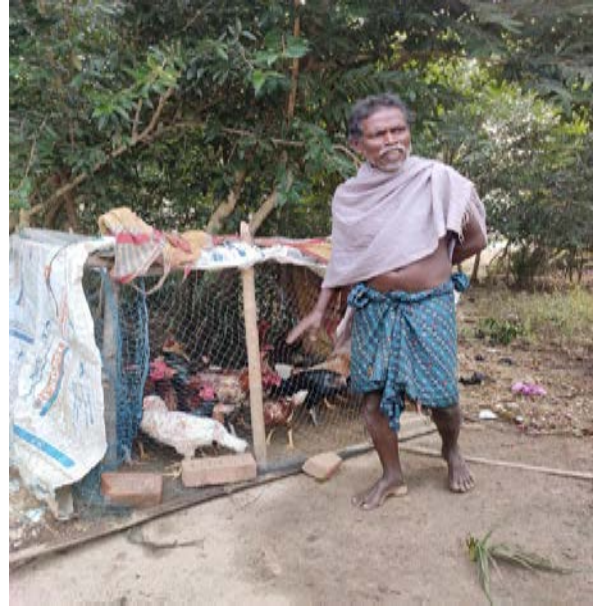
Shed for goats in Musagadia village



Shed for poultry in Musagadia village



Woman beneficiary in Musagadia village



Man beneficiary in Musagadia village



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