

A Baseline Study to find out the Scope of Direct Benefit for Deployment of Resources

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Abstract:

The industrial growth of a nation depends largely on the development and management of its natural and mineral resources which constitute a major part of the rural ecosystem. For example, lime-stone and gypsum are required for the growth and development of the cement industry like any other industrial unit which contributes in the development of overall economy of the country. It is an analysis to find out the scope of direct benefit to community through deployment of existing resources available in Pindwara region, Sirohi district of Rajasthan State of India. Study was conducted on four major resources i.e. Education, Health, Infra-structure and Livelihood. The idea was to conduct a baseline survey of Pindwara region surrounding the UltraTech Nathdwara Cement Limited production plant and prepare an analytical report to understand the availability of means of livelihood, access to civic amenities, access to basic infrastructure and available sources of livelihood, health and education for the rural households, and getting an overview of possible areas of interventions thereafter. For the purpose of this baseline survey, a set of 9 villages was identified that amounts to an overall population of 15,160 people divided among the 3370 households. On the basis of stratified purposive sampling with appropriate representation to SC, ST, OBC and OTHERS, it was proposed to have this study in all the villages with an overall 10% of sample size. The analysis of the collected data includes some interesting and strategically important information highlighting major problem areas and the suggested interventions. The findings are listed here into four different categories to make a conclusive remark on each of these development indicators and also to highlight major areas of interventions (suggested) in each of these 9 villages with respect to these four said development indicators.

2. Introduction:

2.1 About the location:

Pindwara is a town in Sirohi district of Rajasthan, India and it is about 50 km from Abu Road, 100 km

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from Udaipur and 70 from Mount Abu. The cement and Marble industry is the major industry of the area. JK Lakshmi Cement Ltd and Binani Cement are two large cement units based in the area. Many of the locals of the town have settled all across the country like in Mumbai, Ahmedabad, Surat, Karnataka, Andhra Pradesh etc. Ancient temple of Lord Mahavir-- by Samprati Maharaja is situated in the middle of the city. Ancient temple dedicated to Shiva known as Gopeshwarji Mahadev Temple is around 3 km from Pindwara. The place is located near many tribal villages. The town is famous for its marble carving works. The Marble carvings of Sri Ram Temple, Ayodhya is being carried out in the town.

2.2 Resources (On which, the study was conducted):

- Educational Resources
- Health & Medical Resources
- Infra-structural Resources
- Resources for livelihood

2.3 Objectives

- To understand the direct benefit to the community.
- To understand the resources of identified location.
- To understand the community perception and needs of the households of local community.
- To ascertain the community perception to seek greater participation from all sections of the household including men, women, youth and children.

3. About the study:

The idea was to conduct a baseline survey of **nine (9) identified villages** of Pindwara region surrounding the UNCL production plant and prepare an analytical report to understand the availability of means of livelihood, access to civic amenities, access to basic infrastructure and available sources of livelihood, health and education for the rural households, and getting an overview of possible areas of interventions thereafter.

For the purpose of this initial baseline survey, a set of 9 villages was identified that includes Keshavganj, Amlia, Amliya, Malap, Kundal, Varli, Kalumbari, Thandiberi(Pali) and Thandiberi(Sirohi) that amounts to an overall population of 15,160 people divided among the **3370 households**. On the basis of stratified purposive sampling with appropriate representation to SC, ST, OBC and OTHERS, it was proposed to have this study in all the villages with an overall **10% of sample size** that amounts to 337 households, which then was worked out to precisely 350 Households to be taken as the sample size.

The field research was conducted using the basic tools for collecting secondary data like study of the

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previous records, conversations with the gram panchayat officials and village Sarpanch etc in order to collect valuable information on the basic infrastructure of communities, public health infrastructure, agricultural productivity etc. whereas the primary data collection was mainly done with the help of a structured survey and Participative Rural Appraisal (PRA) conducted at each of the individual villages that emphasized on the availability and access to livelihood, education, health and infrastructure facilities to the households and to get an overview of their overall social, economic and livelihood conditions, to understand the scope of further interventions.

The emphasis was given to understand the current socio-economic conditions of the households and their access to basic amenities like education, health, women's hygiene and safety, drinking & non-drinking water, sanitation and civil infrastructure of the villages at the household level, and to get an overview of the access to civic amenities, healthcare, rural infrastructure, government schemes for health and education, agricultural support and infrastructure and other important indicators vital to a sustainable lifestyle in the rural segment.

The detailed analysis of the facts and findings is included ahead in this document based on the response given by the correspondents of these 9 villages during the baseline survey and the other vital information collected from the representative of the communities and through other research tools.

4 Findings from the field:

The analysis of the collected data includes some interesting and strategically important information highlighting major problem areas and the suggested interventions.

4.1 Infrastructure

More than 38% of the overall population is still living in un-built houses. The villagers are also facing problems related to access to clean and safe drinking water. Around 68% of the total respondents who said that there is NO Drinking Water supply available to their homes. Lack of proper sanitation facilities was also seen as a major challenge in terms of overall rural infrastructure. About 46% households among the total 350 respondents who have confirmed that there is NO Personal Toilet available in their homes.

4.2 Education

The case study of Mumal discussed in the report later gives a clear idea that due to the less encouragement from the parent's side, or due to the financial constraints and sometimes due to the lack of proper infrastructure in the village, the girls are deprived of completing their school level education. In this survey also, I have observed a situation where the percentage of girl child attending the pre-school or higher school education (40%) is marginally less as compared to the boys or male child.

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Around 58% of the total respondents (350) say that there is constant a non-availability of a library and other basic facilities in the village school. The 53% of the youth respondents (in age group 18-35) are idle and doing nothing after the school education. It is evident that around 40% of the total numbers of respondents have agreed to the "Need of Training" for the youth.

4.3 Health

The villagers who work in these stone-cutting & carving factories have been dealing with the curse of an occupational disease called Silicosis. In last 5 years, according to the Sirohi district's health department, over 1,650 of these temple-building workers have died due to this fatal, untreatable lung disease. Varli and Sabela villages have most number of Silicosis cases reported. There is a lack of basic health care and medical facilities in the village as there are no hospital or a maternity hospital available there, creating a huge demand for the same.

4.3 Livelihood

The main occupation of the households of 9 villages of the Pindwara district varies from Agriculture (self), to agriculture labour, from working in the stone cutting and carving units to going out for general labour work. But the majority of the men from the families of respondents are working in one or the other type of agriculture related labour work. Around 33% of the total respondent households have their men of the family who move out or migrate for the work. It is also evident that they sometimes travel out to different cities and search for relevant work or any kind of daily wage related job and until they get the work, they remain idle. Now, this is the portion of the working population which needs an **up-skilling**.

Most of the villages were seen having the absence of activities related to agriculture based interventions, and there is a strong need to increase participation of youth and community members by the means of Kisan Club, Kisan Salah Kendra etc.

There are some villages which are well connected with the Damns with the help of a canal, for example the **Thandiberi (Pali)** village which has a total household number of 339 and an average monthly income of Rs. 6785 is having a major canal routing from the 'Jawai Bandh' (The Jawai Damn).

5 Suggested Interventions

Based on the details of overall findings and as per the understanding of development programs, following interventions can be planned in this area:

On the basis of all the findings and information, the 9 villages are then given the average priority points, and based on these priority points, they are sorted for the purpose of making inference for further interventions.

5.1 Suggested interventions for Infrastructure

- Making use of rain water through rain water harvesting for purpose of irrigation

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- Installation of more water tanks for drinking water with the help of panchayat samities
- Building more public toilets and inducing the habit of using public toilets with the help of interactive campaign ideas
- Providing additional support (construction material and water tanks) to the village household to help them build the toilets in their houses.
- Providing them with well-built roads and connectivity with the city hospital and colleges to encourage more youth to avail higher education in the nearby cities.
- Village electrification through solar street lights for better and safe environment.
- Creating provisions for making artificial water reservoirs and also preserving the existing water lakes and ponds by re-constructing their boundaries and overall water holding area.
- Installing more water tanks for the drinking water in the community areas

The priority villages as per the average priority index and ranking (Also Refer Table E-1 Infrastructure) in the Infrastructure section are:

Village Name	Facts & Indicators
Kalumbari	75% households are still living in un-built or “kachcha” houses
Thandiberi (Sirohi)	More than 80% households are facing the lack of drinking water and sanitation facilities
Varli	96% households are not having proper toilets and public sanitation facilities

5.2 Suggested interventions for Education

- Upgrading the schools and anganwadis by building additional rooms and play group activity areas by adopting the ideas of Early Child Care & Education (ECCE).
- Providing additional material to support interactive learning in the schools & anganwadis
- Increasing the participation of women and girl children by engagement activities at anganwadis
- Increasing the number of teachers and lady teachers in the schools to induce more attendance
- Making basic infrastructure and hygiene facilities available in the schools for girls

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- Creating a career counselling cell and students advisories to guide them for after school options
- Encouraging sports and co-curricular activities in the schools for the holistic development with special emphasis on girl child and children with special abilities.
- Assuring the provision of mid-day meals and nutritional food in the schools for children under primary section for their health and better attendance in the schools

The priority villages as per the average priority index and ranking in the Education section are:

Village Name	Facts & Indicators
Kundal	88% households have girl child (0-6 years of age) not coming to Anganwadis
Amla	70% overall and 79% girl children not coming to Anganwadis
Thandiberi-Pali	89% households confirm the lack of basic facilities in the schools

5.3 Suggested interventions for Health

- Awareness campaign and programs should be run with the help of interactive activities, community awareness drives, wall paintings, and other activities which can be organized for women and children in the Anganwadis in order to make people more sensitive towards Health and medical care issues
- Provision must be made for making at least one hospital for each group of 10-12 villages where people can get basic health care facilities, routing health check-ups and other important medical care at the time of any emergency.
- A mobile health care van can also be provided with on the go facilities and which can accommodate some periodic activities like blood tests, vaccination camps, health camps etc.
- Special arrangements can be provided for the patients with prolonged diseases like health insurance, critical care facilities at the time of emergency
- Increasing the number of ANM in the villages so as to make each village access the basic services provided by the ANM
- People must be made aware and also encouraged to make the child deliveries at hospitals and nursing homes rather than getting it done at homes, to avoid infant and mother deaths.

The priority villages as per the average priority index and ranking in the Health section are:

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Village Name	Facts & Indicators
Kundal	89% child deliveries are still taking place in the homes.
Malap	More than 75% households are facing the issue of lack of medical facilities and infant mortality & mother's death during delivery
Thandiberi-Sirohi	More than 75% households are facing the issue of lack of medical facilities and infant mortality and mother's death during delivery

5.4 Suggested interventions for Livelihood

- More practices and activities to be induced for increasing the farming yield of the farmers like attaching them with government schemes like Kisan Credit Cards, Kisan Clubs, Youth clubs
- Organizing periodic activities and camps to teach them the use of some advance tools like Soil Health Cards, Organic farming, Rotational cropping, hybrid seeds and other practices
- Organizing career counseling camps and rozgar-melas for the youth who have passed out of school and now seeking guidance for further education or a job
- Providing skill based training in the areas like industrial labor, fitter, mechanic, machine operator, electrician, house-keeping, security guard and other skill based sectors where they can prepare for better job opportunities
- Special provisions can be made to connect the important canals to the villages where there is a lack of water supply. This can be done to encourage more farming and usage of water for commercial purposes in start-up and other uses.

The priority villages as per the average priority index and ranking in the Livelihood section are:

Village Name	Facts & Indicators
Malap	More than 74% households have farming land but on contrary more than 72% of them are unaware of best agriculture practices.
Keshavganj	More than 55% households have farming lands, but more than 90% of them are still unaware of advance farming and agriculture techniques.
Amliya	More than 56% households have farming lands, but more than 97% of them are still unaware of basic agriculture support and practices, they still practice traditional agriculture with single rotation of crops per year.

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