REPORT OF BASELINE SURVEY CONDUCTED IN SEVEN VILLAGES OF SANGRUR, PUNJAB

INDIAN OIL CORPORATION LIMITED CSR PROJECT



Conducted by

National Corporate Social Responsibility Hub Tata Institute of Social Sciences Mumbai- 400088 2012-14

> <u>Commissioned by</u> Indian Oil Corporation Limited

RESEARCH TEAM AT NCSR HUB

Project Director

Dr. B. Venkatesh Kumar

Faculty Guide

Prof. T. Rajaretnam

Project Coordinators

Mr. Avadh Bihari Ms. Priyanka Korde

TISS Programme Officer

Mr. Amit Verma

Local Programme Officer

Mr. Ajay Shukla

Field Investigators

Ms. Kanchan Mr. Yatinder Shukla Mr. Deepak Mr. Sushil Dixit Ms. Shazia Mr. Dheeraj

Data Analysis, Data Interpretation and Report Writing

Mr. Amit Verma

Report finalisation, Special Inputs, Proof Reading

Mr. Avadh Bihari Ms. Priyanka Korde

Secretariat Support

Ms. Vaishali Gajbiye Ms. Rajisha Ramanakutty Ms. Sushma

ACKNOWLEDGEMENT

Firstly, we would like to thank Indian Oil Corporation Limited for granting this project to us. We express gratitude to Mr. Satish Kumar, ED, HR, Mr. K.J. Kumar, DGM, HR, CO, Mr. Bibhuti Pradhan, CM, CO, Mr. R.P. Agarwal, Manager, CO, Mr. K.K. Sharma, CM, A&W (Phase Coordinator for phase II), and Mr. A.K. Khinder, OM. We also thank other office staff of Indian Oil Corporation Limited for their support since the beginning till the completion of this study. We thank them for coordinating the study with the Hub's team.

We are grateful to the Programme Managers and the Programme Officers and the entire local research staff for conducting this study efficiently. We thank them for diligently completing the study by visiting the field and conducting meeting with all the stakeholders of the projects.

B. Venkatesh Kumar Professor & Chairperson Centre for Public Policy & Governance Tata Institute of Social Sciences

LIST OF ABBREVIATIONS

1.	IOCL	: Indian Oil Corporation Limited
2.	CSR	: Corporate Social Responsibility
3.	TISS	: Tata Institute of Social Sciences
	DPE	: Department of Public Enterprises
5.	CPSE	: Central Public Sector Enterprises
6.	NCSRH	: National Corporate Social Responsibility Hub
	BDO	: Block Development Office
8.	CS Pro	: Census and Survey Processing System
9.	SPSS	: Statistical Product and Service Solutions
10.	MoC	: Memorandum of Collaboration
	RCC	: Reinforced Concrete Cement
	PCC	: Plain Concrete Cement
	LPG	: Liquefied Petroleum Gas
	OBC	: Other Backward Classes
	SC	: Scheduled Caste
16.	ST	: Scheduled Tribe
	IAY	: Indira Awaas Yojana
	MDM	: Mid-Day Meal
	NGO	: Non-Governmental Organisation
	HH	: Household
	OAD	: Open Air Defecation
	MOWS	: Ministry of Water Resources
	MAP	: Mass Awareness Programmes
	ODS	: Open Defecation System
	RMP	: Registered Medical Practitioner
	SHC	: Sub-Health Centre
	ASHA	: Accredited Social Health Activist
	PHC	: Primary Health Centre
	CHC	: Community Health Centre
	MGNREGA	1 2
	PDS	: Public Distribution System
	APL	: Above Poverty Line
	BPL	: Below Poverty Line
	AAY	: Antyodaya Anna Yojna
	DTP	: Desk Top Publishing
	APMC	: Agricultural Produce Market Committee
	ITI	: Industrial Training Institute
	MBBS	: Bachelors of Medicine and Bachelors of Science
	BAMS	: Bachelor of Ayurveda, Medicine and Surgery
	RO	: Reverse Osmosis
	SHG	: Self Help Group
	CCR	: Concrete Cement Roads
	MMV	: Mobile Medical Van
	CGWB	: Central Ground Water Board
45.	11	: Information Technology

INDEX

RESE	ARCH TEAM AT NCSR HUB	. i
ACKN	IOWLEDGEMENT	ii
LIST (DF ABBREVIATIONS	ii
INDEX	x i	V
LIST (DF TABLES	v
LIST (DF FIGURES	v
EXEC	UTIVE SUMMARY	vi
CHAP	FER 1: INTRODUCTION	1
1.1.0	ORPORATE SOCIAL RESPONSIBILITY	1
1.2. S	IGNIFICANCE OF CSR	2
1.3. N	IATIONAL CORPORATE SOCIAL RESPONSIBILITY HUB	3
1.4. II	NDIAN OIL CORPORATION LIMITED	4
1.4	.1. CSR Approach of Indian Oil Corporation Limited	6
CHAPT	FER 2: METHODOLOGICAL CONSIDERATIONS	7
2.1.0	DBJECTIVES OF THE BASELINE SURVEY	7
2.2. F	ESEARCH DESIGN	7
2.3. S	AMPLING	9
2.3	1.1. MULTI-STAGE SAMPLING FOR SPECIFIC LOCATIONS	2
2.4. T	OOLS OF THE STUDY – SURVEY INSTRUMENTS1	2
2.5. D	DATA COLLECTION	3
2.6. D	DATA ENTRY	4
2.7. 0	DATA INTERPRETATION AND ANALYSIS1	4
2.8. 0	OORDINATION OF THE PROJECT1	4
CHAPT	FER 3: VILLAGE DEMOGRAPHICS1	5
CHAP	FER 4: SANGRUR, PUNJAB: An In-depth Analysis2	2
4.1	DEMOGRAPHIC & HOUSING CHARACTERISTICS	3
4.2	LITERACY & EDUCATIONAL STATUS2	7
4.3	VOCATIONAL TRAINING	0
4.4	WATER RESOURCES, SANITATION & HYGIENE3	5
4.5	HEALTH CARE FACILITIES & BIRTH DETAILS4	0

4.6	LIVELIHOOD, LANDHOLDING & LIVESTOCK	
4.7	SOCIAL WELFARE SCHEMES	
4.8	SAFETY NETS & CREDIT PATTERNS	50
4.9	INFRASTRUCTURE- AVAILABLITY AND ACCESSIBILITY	54
	FER 5: AN OVERVIEW OF PROBLEMS AND POSSIBLE AREAS OF VENTIONS	62
5.1	SALIENT FEATURES OF PROBLEMS AND RECOMMENDATIONS	62
5.2	Prioritising and Nature of Interventions	62
5.3	Priority 1: Health care Facilities – Medium term intervention	64
	5.3.1 Village specific findings:	64
5.4	Priority 2: Livelihood – Long term intervention	67
	5.4.1 Village Specific findings:	68
5.5	VILLAGE SPECIFIC PROBLEMS AND RECOMMENDATIONS	72
CON	CLUDING REMARKS	78
IN	PORTANT CONSIDERATIONS PRIOR TO IMPLEMENTATION	
BIBLI	DGRAPHY	
ANN	EXURES	82
Villag	Questionnaire	
House	old Questionnaire	

LIST OF TABLES

Table 1: DEMOGRAPHIC & HOUSING CHARACTERISTICS	23
Table 2: LITERACY & EDUCATIONAL STATUS	27
Table 3: VOCATIONAL TRAINING	30
Table 4: WATER RESOURCES, SANITATION & HYGIEN	35
Table 5: HEALTHCARE FACILITIES & BIRTH DETAILS	40
Table 6: LIVELIHOOD, LAND HOLDING & LIVESTOCK	44
Table 7: SOCIAL WELFARE SCHEMES	49
Table 8: SAFETY NETS & CREDIT PATTERNS	50
Table 9: INFRASTRUCTURE FACILITIES & ACCESSIBILITY	54

LIST OF FIGURES

Figure 1: Type of Toilet Facility	38
Figure 2: Primary Mode of Treatment	42

EXECUTIVE SUMMARY

Introduction

The research study conducted in Sangrur is part of the Baseline Survey commissioned by Indian Oil Corporation Limited to National Corporate Social Responsibility Hub, Tata Institute of Social Sciences. This study was undertaken as per the terms of the Memorandum of Collaboration (MoC) between IOCL and TISS as signed on 27th of November, 2012. The Baseline Survey is spread across 5-7 villages in each of the 41 locations across 21 states, making it a large-scale study affecting more than 270 villages across India. Seven villages, five in the district of Sangrur and two in the district Kaithal were chosen for implementation of the study by IOCL officials.

Study Design

The Baseline Survey was conducted with the three-fold objectives: to establish baseline information of the villages in order to gauge their present situation; to understand the needs of the households, levels of accessibility and availability to services; to identify the gaps and challenges and chalk out the possible areas of CSR intervention.

This was an exploratory study using Quantitative methods of investigation. Two separate quantitative tools were developed: Household questionnaire and Village questionnaire to triangulate information and obtain best possible accuracy of data. The questionnaires were scientifically designed to obtain household and village-level information on various socio-economic indicators. The data obtained has been thematically segregated in the report in the following domains:

- 1. Demographic and Housing Characteristics
- 2. Literacy and Educational Status
- 3. Vocational Training
- 4. Water Resources, Sanitation and Hygiene
- 5. Health-care Facilities and Birth Details
- 6. Livelihood, Landholding and Livestock
- 7. Social Welfare Schemes
- 8. Safety Nets and Credit Patterns
- 9. Infrastructure Availability and Accessibility

Systematic Random Sampling method was employed with the help of existing enumeration lists (Voters' list) obtained from local authorities. The data, after on-field data collection, was entered and analysed using SPSS.

Findings and Recommendations

The villages of district Sangrur are dominated by Sikh religion, and they are fairly developed in terms of its infrastructure. The sampled villages are fairly developed in terms of housing with a considerable number of the houses in all the villages being constructed with Reinforced Cement-concrete (RCC), with almost all households having electricity and adequate penetration of advanced fuels such as LPG.

Apart from developed state of villages, there are areas of grievance which need to be addressed through sound interventions along with efforts that can be taken to further improve the quality of life. The major areas of intervention found across the surveyed villages of Sangrur and Kaithal are:

1. **Health:** As per the data, majority of the population in all the sampled villages access the services of RMPs which are also known as local and *jholachap* doctors who do not have any license to practice any kind of medicines. The lack of health facilities in the villages is the major reason to access the services of easily available local doctors. During the interaction with the participants it came to the notice that accessibility of PHC is less because of the reasons like absence of health personnel and lack of medicines availability. In all the surveyed villages there are considerably several people from underprivileged caste groups who are not economically sound and could not afford the high cost of treatment from private hospitals or clinics.

Due to these reasons, health care facilities are the main issue in all the villages that need to be addressed by means of MMVs as all the villages are connected with the roads and it is easy to start a mobile service to improve the health seeking behaviour of the villagers.

2. **Livelihood:** Lack of suitable livelihood options is also found to be one of the pressing challenges in all the seven villages. All these villages have agrarian economy but because of less profit margins, non-availability of own agricultural lands, people are found to be shifted towards non-agricultural and agricultural labour. Further due to lack of skills, people are unsuitable for

employment in nearby industries. The unemployment in youth is also a serious challenge as they do not have relevant qualifications that could enable them to get work in the market.

Prioritisation and Categorisation of Interventions

Interventions for above-mentioned problems have been elaborated upon in the report. The interventions, as per the IOCL-TISS MoC requirement have also been prioritised on the basis of stakeholders' views, data analysis and on-field observations of the Research team. This means that in each village the recommended intervention on Priority-1 should be given first preference and importance over others and accordingly implementation should be planned for each village. Moreover, the interventions have been identified and categorised on Short, Medium and Long term basis keeping in mind the nature of the interventions to be planned for implementation for each village.

CHAPTER 1: INTRODUCTION

1.1. CORPORATE SOCIAL RESPONSIBILITY

The concept of CSR, although an age old one, has multiple definitions based on how it is understood. It was 30 years ago that Votaw wrote: *'Corporate Social Responsibility means something, but not always the same thing to everybody"* (Garriga & Mele, 2004). CSR, although, a subjectively understood idea, finds at its core, the integration of the communities social, environmental and other concerns into the company's business operations.

The role of businesses in social welfare has seen a major shift over the years. It has changed its trajectory from philanthropy to go in the direction of coming up with long-standing sustainable projects with a predetermined goal. As Frederick (1987, 1998 as cited in Garriga & Mele, 2004) stated, CSR has transcended over the years from being an ethical-philosophical concept to an action-oriented managerial concept of social responsiveness. Which goes to say that it now entails understanding the interaction between business and society, comprehension of responsibility of business towards society and finally, relationship-building. Hence, two of the four dimensions of business along with income-generation and political performance are social demands and ethical values. Social demands and ethical values display connect between society and business and bring out the two-way relationship between the two.

One of the very many groups of theories (Integrative theories) constructed around CSR states how business should integrate social demands since business depends on society for its existence, continuity and growth (Garriga & Mele, 2004). It is in the form of social demands, the society interacts with business and hence it should be made so that the business operates in accordance with the current social values.

One more important aspect of CSR is, understanding that social needs that are not set in time and space. There is a constant shift in society and the business, in its attempt at social welfare, needs to keep track of it and modify its ways in accordance.

1.2. SIGNIFICANCE OF CSR

Since the adoption of LPG (Liberalisation, Privatisation and Globalisation) policies by the Indian government in the 1990's, the economy of India has seen a monumental rate of growth. Although liberalisation and globalisation is a radical phenomenon in world economy, it accounts for a lot of economic tension for India since it is still a developing nation with a very different socio-economic makeup and flow of money than the rest of the world. The growing industrialisation due to liberalised policies coupled with low-cost technology, has led to a host of social and environmental challenges such as water scarcity, pollution, labour conditions, displacement of communities, effect on agriculture and livelihood etc. These must be addressed to avoid weakening the nation's ability to sustain growth and development in the decades to come. In addition to these, due to its still developing status, adoption of society being ignored and left behind from the process of development. Although the Indian constitution promises economic equality along with other rights, a large portion of Indian voters remain economically disadvantaged (Zile, 2012). These reinforce the need for an existence of a social welfare mechanism.

Since the corporates are becoming more economically powerful than the State, joining forces with individual companies by mandating promotion of social welfare could simulate a win-win situation. It could, on one hand, help bridge the economic divide in the society by the upliftment of backward areas and communities. On the other hand, it helps the company create a relationship with its stake-holders thereby promoting goodwill of the company. The government gives the companies the autonomy of choosing how and where they wish to utilise their CSR funds while avoiding additional taxes in the process.

For this, Department of Public Enterprises (DPE) under Ministry of Heavy Industries & Public Enterprises has introduced the CSR Guidelines in March, 2010 for the Central Public Sector Enterprises (CPSEs). According to the revised DPE guidelines (IEF April, 2013), CSR is, "the responsibility which the corporate enterprises accept for the social, economic and environmental impact their activities have on the stakeholders. The stakeholders include employees, consumers, investors, shareholders, civil society groups, Government, Non-Governmental Organisations, communities and the society at large. It is the responsibility of the companies to not only shield

the diverse stakeholders from any possible adverse impact that their business operations and activities may have, but also entails affirmative action by the companies in the social, economic and environmental spheres as expected of them by the stakeholders, to the extent of their organisational resource capabilities." It also states, "It is now universally accepted that corporate social responsibility is not a stand-alone, one time, ad-hoc philanthropic activity. Rather, it is closely integrated and aligned with the business goals, strategies and operations of the companies. There is a close integration of social and business goals of companies" (Guidelines on Corporate Social Responsibility and Sustainability for Central Public Sector Enterprises, 2013). The guidelines give a view about the concept of CSR and how a corporate needs to conceptualise its CSR interventions prior to their implementation. Earlier the trend was more of charity or philanthropy which was considered as CSR but in recent times a shift has taken place with focus on the participation of people with the employees in implementing CSR initiatives. The interventions are required to be thoroughly researched on the basis of that the programmes/project have to be formulated which is a new and phenomenal development in the last few years. This interest and initiative is seen on part of the CPSEs as they gradually realise their responsibility towards the environment, people and the potential of such a corporate in affecting change.

1.3. NATIONAL CORPORATE SOCIAL RESPONSIBILITY HUB

As stated before, CSR in modern times is becoming an increasingly streamlined and organised process and since the trend is moving from ad-hoc philanthropic activities to long-term social modification, an understanding of social aspects becomes a necessity. National Corporate Social Responsibility Hub (NCSRH) was created by the DPE under the guidelines for CSR at Tata Institute of Social Sciences (TISS), Mumbai. TISS, a pioneer educational institution in social sciences, was chosen to establish NCSRH by the DPE for its 75 years of experience and expertise of teaching, research, advocacy, capacity building, publications, documentation, and field interventions. The Hub is created to carry out the following tasks:

- 1. Preparation of panels of Agencies for CSR Activity
- 2. Nation-wide compilation, documentation, and creation of database;
- 3. Training and Competency building

- 4. Advocacy; and Research;
- 5. Think Tank; Conferences and Seminars
- 6. Promotional Activities and Dissemination

The NCSRH comprises of a dedicated team working closely and dealing with CPSEs approaching the Hub for the shelf of activities as per the DPE Guidelines on CSR. The major activities are related to Research in which the Hub conducts Baseline survey and recommends the possible areas of interventions to the CPSEs based on the findings thereof. The Hub's recommendations are holistic and sustainable in line with the DPE Guidelines and come out from scientific techniques covering all the major areas like water, sanitation, health, education, livelihood, with a multi-stakeholder approach. After receiving recommendations from the Hub, CPSEs choose from the possible areas of interventions and implement projects in accordance with their CSR policy and CSR budget allotted for the year.

For implementation of the activities, CPSEs require credible partners in the form of Non-Governmental Organisations (NGOs), Trusts, Community-based Organisations etc. For this task, the hub is engaged in a continuous process of empanelling organisations from different states spread across the country. For the purpose, the Hub has an independent team consisting of the faculty from TISS, engaged in scrutinizing the applications of these implementing organisations and shortlist credible organisations on the basis of pre-decided parameters. The Hub also undertakes the Impact Assessment and Evaluation studies for the CPSEs' CSR activities that are undergoing or have been completed even prior to the DPE Guidelines being implemented. The Hub then scrutinizes on-field implementation, effect, benefits and gaps in the programmes and recommends improvements thereof for effectively achieving the programme objectives.

1.4. INDIAN OIL CORPORATION LIMITED

Indian Oil is India's flagship national oil company, with business interests that straddle the entire hydrocarbon value chain - from refining, pipeline transportation and marketing of petroleum products to exploration & production of crude oil & gas as well as marketing of natural gas and petro-chemicals. It is the highest ranked Indian corporate in the prestigious Fortune 'Global 500' listing, ranked at the 83rd position in the year 2012. Indian Oil and its subsidiaries have a dominant share of the petroleum products' market, national refining capacity and downstream

sector pipelines capacity. With a strong workforce, Indian Oil has been helping to meet India's energy demands for over five decades now.



Indian Oil has a concerted social responsibility programme to partner communities for health, family, welfare, education, environment and cultural heritage protection. The Corporation has always been at the forefront during national emergencies stepping in to provide assistance, relief and rehabilitation as well as maintaining an uninterrupted supply of petroleum products. Indian Oil has successfully combined its corporate social responsibility with its business offerings, meeting the energy demands of millions of people every day, across the length and breadth of the country.

Indian Oil has time and again rallied to help victims of natural calamities, maintaining uninterrupted supply of petroleum products and contributing to relief and rehabilitation measures. Indian Oil has successfully combined its CSR agenda with its business offerings.

1.4.1. CSR Approach of Indian Oil Corporation Limited

At Indian Oil, corporate social responsibility (CSR) has been the cornerstone of success right from its inception in the year 1964. The Corporation's objectives in this key performance area are enshrined in its Mission statement: "...to help enrich the quality of life of the community and preserve ecological balance and heritage through a strong environment conscience."

Indian Oil has defined set of core values– Care, Innovation, Passion and Trust – to guide them in all they do. They take pride in being able to claim almost all countrymen as customers. That's why, they coined the phrase, "Indian Oil – India Inspired", in their corporate campaigns. Public corporations like Indian Oil are essential organs of society deploying significant public resources. They, therefore, are aware of the need to work beyond financial considerations and put in that little extra to ensure that they are perceived not just as corporate behemoths that exist for profits, but as wholesome entities created for the good of the society and for improving the quality of life of the communities they serve¹.

¹<u>www.iocl.com</u>

CHAPTER 2: METHODOLOGICAL CONSIDERATIONS

This chapter on methodology will give information about the research design, sampling method, objectives, rationale used for the study. This becomes pertinent so as to give the reader a thorough understanding about the research process followed by the researchers so as to give a rationale and background to the findings of the study. This methodology is the basis of the study conducted by National CSR Hub, TISS for IOCL. The entire methodology, including the objectives, sampling and tools has been in consultation with faculty experts within TISS and this was shared and discussed with the company prior to the study.

2.1. OBJECTIVES OF THE BASELINE SURVEY

- To obtain baseline information of socio-economic conditions like housing, sanitation, education, health, livelihood and safety nets of the households in the villages
 - To assess the present situation of the villages and obtain information about the facilities and services available to the locals
 - To assess the needs of the households to understand the major areas of interventions from the locals' point of view
- To understand the levels of availability and accessibility to services and facilities in and around the villages for the locals
- To understand the critical areas or challenges and find out the possible areas of CSR interventions

2.2. RESEARCH DESIGN

A research design is used to give structure to a research. It provides a blueprint for the entire study, from its inception to the end, to maximize control over factors thereby reducing random error, controlling systematic error and enhancing the overall validity of the research. A research design, by answering the four major questions; which questions are to be asked, *what* data is

relevant, best *way to obtain* the data and how to *analyse* it; helps streamline the process of research and bring it in line with its given objectives.

The current study adopts an *exploratory research design*. An exploratory design, as the name suggests, is used when not much prior information is available about the research questions. It helps to look at the problem in isolation without forming preconceived notions in the mind of a researcher. An exploratory design is, in fact, made use of to determine the nature of the problem. Moreover, it is used as it gives flexibility to delve deep into the subject at hand and 'explore' various aspects that may come out prior or during the study to gain a better understanding of the problem at hand.

Considering the number of locations and villages, to standardise the study, Quantitative Research was adopted. "Quantitative research is 'Explaining phenomena by collecting numerical data that are analysed using mathematically based methods (in particular statistics)" as defined by Aliaga and Gunderson (2000).² Therefore, quantitative research method is used in this study to quantify the data by using sampling methods and analyse it statistically, and further generalise it to a larger universe. This quantitative method identifies certain significant indicators that help assess the real situation of the population and the set objectives of the study. The following thematic areas were considered to determine the quality of life by creating a complete village and household profile:

- 1. Demographic and Housing Characteristics
- 2. Literacy and Educational Status
- 3. Vocational Training
- 4. Water Resources, Sanitation and Hygiene
- 5. Health-care Facilities and Birth Details
- 6. Livelihood, Landholding and Livestock
- 7. Social Welfare Schemes
- 8. Safety Nets and Credit Patterns
- 9. Infrastructure Availability and Accessibility

The data was collected at two levels viz. Village level and Household level. The Household Questionnaire was to understand the socio-economic situation at the household level on the above-mentioned areas/ parameters, whereas the Village Questionnaire looked at the structure and make-up of the village as a whole and finding information from the point of view of the officials and key persons from the village. Information at the village level was collected from

² Introduction to Quantitative Research: <u>http://www.sagepub.in/upm-data/36869_muijs.pdf</u>

key stakeholders like Sarpanch, Secretary, School Principal, Teachers, Doctors, etc. providing a bird's eye view of the village; while the household information was collected from independent households in the village.

2.3. SAMPLING

Being a quantitative method and spread over multiple locations across various States of India, this study had to select a sample out of the total population. It was designed based on systematically selected households as the 'sample' and the village on the whole as the total 'universe'. The aim in a Sample Survey is to generalise and universalise the data collected and findings of the sample population to the entire universe that is the total population. The following is the step-wise sampling method that was followed for this study:

Step 1

The survey was conducted in 5-7 pre-decided villages at every location covered under the scope of the study. A minimum sample size of 50 was decided for each village irrespective of the population and number of households in the village. This was a measure taken to standardise the sampling across all locations keeping in mind the representativeness of the sample as there are inevitable differences in each location due to its uniqueness in geography, demography, locale, etc. A household sample of 400 across the sampled villages was to be drawn. An additional 50 number of household sample was added to the 400 to rule out loss of data in case of unforeseen circumstances and human errors. Thus, the total sample from each location was to be 450 households across 5-7 villages.

The sample size for every location was decided by keeping duration of the field work, size of questionnaire and man days in mind. After the preliminary decision of a total of 450 across the 5-7 villages in a location and a minimum sample of 50 within each village, a formula was devised to draw the sample size of each of the village according to the number of population and households in the village. Depending on the size of the population, additional sample size was proportionately computed to make up the final number of 450 for each location. A matrix to calculate the exact number of sample to be drawn from each village was designed using computing techniques in Microsoft Excel. A sample of the calculations is provided below for reference.

	<u>E</u> dit	<u>V</u> iew <u>I</u>	Insert F <u>o</u> rmat <u>T</u> ool		indow	<u>H</u> elp					
	- 🖻		2 🗾 🔚 🛓		· 🔏		· 🍰		• 🕐 •	3	9
b	Arial		▼ 10	•					₩ .J	%	0
14			∇ $f(x)$ Σ =								
	Α	В	С	D	E	F	G	Н		J	
1											_
2		Ing	put: List of 7 villages with n households	umber of							
3		SINo	Village	HHs							+
1		1	Pudakalkatti	433							
5		2	Kvarkop	421							
5		3	Govankoppa	192							
7		4	Belur	395							_
3		5	Goutan Nagalavi	48							_
) 0		6 7	Benkankatti T.R.Nagar	227							-
1				20							
		<u> </u>		36							+
-			Total	36 1752							
2											
2 3				1752 Der of househol	ds, sampl	e selectio	on process	s and sar	mple size		1
2 3			Total	1752	ach villag	e			·		
2 3 4			Total	1752 Der of househol	ds, sampl ach villag Minimum sample	e <u>HHs</u> in <u>excee</u> of	on process Addi sample	s and sar Total sample			
2 3 4 5		Output:	Total List of 7 villages with numb Village	0er of househol allocation to e HHs	ach villag Minimum sample size	e <u>HHs</u> in <u>excee</u> of 50	Add sample size	Total sample size	Weight		
2 3 4 5 6		Output: SINo	Total List of 7 villages with numb Village Pudakalkatti	Der of househol allocation to e HHs 433	ach villag Minimum sample size 50	e <u>HHs</u> in <u>excee</u> of 50 383	Addl sample size 31	Total sample size 81	Weight 1.367438		
2 3 4 5 6 7		Output: SINo 1 2	Total List of 7 villages with numb Village Pudakalkatti Kyarkop	Der of househol allocation to e HHs 433 421	Ach villag Minimum sample size 50 50	e <u>HHs</u> in <u>excee</u> of 50 383 371	Add sample size 31 30	Total sample size 81 80	Weight 1.367438 1.345785		
2 3 4 5 6 7 8		Output: SINo. 1 2 3	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa	Der of househol allocation to e HHs 433 421 192	Ach villag Minimum sample size 50 50 50	e <u>HHs</u> in <u>excee</u> of 50 383 371 142	Add sample size 31 30 12	Total sample size 81 80 62	Weight 1.367438 1.345785 0.800357		
2 3 4 5 6 7 8 9		Output: SINo 1 2 3 4	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa Belur	Der of househol allocation to e HHs 433 421 192 395	Ach villag Minimum sample size 50 50 50 50	e <u>HHs</u> in <u>excee</u> of 50 383 371	Add sample size 31 30	Total sample size 81 80 62 78	Weight 1.367438 1.345785 0.800357 1.297006		
2 3 4 5 6 7 8 9 0		Output: SINo. 1 2 3	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa Belur Goutan Nagalavi	Der of househol allocation to e HHs 433 421 192	ach villag Minimum sample size 50 50 50 50 48	e <u>HHs</u> in <u>excee</u> of 50 383 371 142	Add sample size 31 30 12	Total sample size 81 80 62 78 48	Weight 1.367438 1.345785 0.800357 1.297006 0.256849		
2 3 4 5 7 8 9 0		Output: <u>SINo</u> 1 2 3 4 5	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa Belur	Der of househol allocation to e HHs 433 421 192 395 48	Ach villag Minimum sample size 50 50 50 50	e <u>HHs</u> in <u>excee</u> of 50 383 371 142 345 0	Add sample size 31 30 12 28 0	Total sample size 81 80 62 78 48	Weight 1.367438 1.345785 0.800357 1.297006 0.256849 0.904237		
2 3 4 5 6 7 8 9 0 1 2 2		Output: <u>SINo</u> 1 2 3 4 5	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa Belur Goutan Nagalavi Benkankatti	Der of househol allocation to e HHs 433 421 192 395 48 227	Ach villag Minimum sample size 50 50 50 50 50 50 50 50 50 50 50	e HHs.in excee of 50 383 371 142 345 0 177	Add sample size 31 30 12 28 0	Total sample size 81 80 62 78 48 64	Weight 1.367438 1.345785 0.800357 1.297006 0.256849 0.904237		
2 3 4 5 6 7 8 9 0 1 2 3		Output: SINo 1 2 3 4 5 6 7 Instructio	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa Belur Goutan Nagalavi Benkankatti T.R.Nagar Total	Der of househol allocation to e HHs 433 421 192 395 48 227 36 1752	ach villag Minimum sample size 50 50 50 50 50 50 30 30 334	e <u>HHs</u> in <u>excee</u> of 50 383 371 142 345 0 177 0 1418	Addi sample size 31 30 12 28 0 14 0 14	Total sample size 81 80 62 78 48 48 64 36	Weight 1.367438 1.345785 0.800357 1.297006 0.256849 0.904237		
2 3 4 5 6 7 8 9 0 21 22 3 24 25		Output: SINo 1 2 3 4 5 6 7 Instructio Enter or c	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa Belur Goutan Nagalavi Benkankatti T.R.Nagar Total Diss opy and paste the list of 7 village	1752 Deer of househol allocation to e HHs 433 421 192 395 48 227 36 1752 ues and number of	Ach villag Minimum sample size 50 50 50 50 50 50 30 30 334	e HHs in excee of 50 383 371 142 345 0 177 0 1418 s in the inp	Addi sample size 31 30 12 28 0 14 0 14	Total sample size 81 80 62 78 48 48 64 36	Weight 1.367438 1.345785 0.800357 1.297006 0.256849 0.904237		
2 3 4 5 6 7 8 9 20 11 22 23 24 25 26		Output: SINo 1 2 3 4 5 6 7 Instructio Enter or c Copy the	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa Belur Goutan Nagalavi Benkankatti T.R.Nagar Total Diss opy and paste the list of 7 village unshaded portion of Output tab	1752 Deer of househol allocation to e HHs 433 421 192 395 48 227 36 1752 ues and number of le and paste as vi	ach villag Minimum sample size 50 50 50 50 50 48 50 36 334 f household alues elsew	e <u>HHs</u> in <u>excee</u> of 50 383 371 142 345 0 177 0 1418 is in the inp <i>t</i> here.	Addi sample size 31 30 12 28 0 14 0 14	Total sample size 81 80 62 78 48 48 64 36	Weight 1.367438 1.345785 0.800357 1.297006 0.256849 0.904237		
2 3 4 5 5 6 7 7 8 9 9 0 0 1 1 2 2 3 3 2 4 2 5 2 6 6 7 7 2 7 2 7		Output: SINo 1 2 3 4 5 6 7 Instructio Enter or c Copy the Continue f	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa Belur Goutan Nagalavi Benkankatti T.R.Nagar Total Dis opy and paste the list of 7 village unshaded portion of Output tab the process until the sample siz	1752 Deer of househol allocation to e HHs 433 421 192 395 48 227 36 1752 ues and number of le and paste as va re is estimated for	ach villag Minimum sample size 50 50 50 50 50 48 50 36 334 f household alues elsew all location	e HHs in excee of 50 383 371 142 345 0 177 0 1418 is in the inp there. s	Addi sample size 31 30 12 28 0 14 0 14 0 116 ut table	Total sample size 81 80 62 78 48 48 64 36	Weight 1.367438 1.345785 0.800357 1.297006 0.256849 0.904237		
2 3 4 5 5 6 7 8 9 9 0 1 1 2 2 3 3 2 4 2 5 5 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3 3 4 3 3 4 4 3 5 5 5 5 5 5 5 5 5 5 5 5		Output: SINo 1 2 3 4 5 6 7 Instructio Enter or c Copy the Continue t Remove a	Total List of 7 villages with numb Village Pudakalkatti Kyarkop Govankoppa Belur Goutan Nagalavi Benkankatti T.R.Nagar Total Diss opy and paste the list of 7 village unshaded portion of Output tab	er of househol allocation to e HHs 433 421 192 395 48 227 36 1752 es and number o le and paste as vi te is estimated for age, Households,	Ach villag Minimum sample size 50 50 50 50 50 48 50 30 30 334 f household alues elsew all location Total samp	e <u>HHs</u> in <u>excee</u> of 50 383 371 142 345 0 177 0 1418 Is in the inp /here. s ble size and	Addl sample size 31 30 12 28 0 14 0 14 0 116 ut table	Total sample size 81 80 62 78 48 48 64 36	Weight 1.367438 1.345785 0.800357 1.297006 0.256849 0.904237		

Step 2

The number of households and the total number of population was acquired from the online census data, 2001 for each of the villages (Census of India, 2011 results were not available for all locations at the time of designing and conducting the said study). In case where the census data was absent for a few villages on the official website of the Census of India, the information was

then collected on field from the Panchayat, the BDO office or the Municipal Corporation office as relevant to finalise the sample from those villages.

After acquiring the data needed to compute the sample numbers, the next step was to systematically and effectively draw out specific names of households. This was to maintain authenticity and avoid bias in the data and impartially select households from each village through a systematic method. To acquire the pool of sample households, the latest enumeration list was required for each village. Given the paucity of time, manually enumerating each household in each village was not possible and therefore the next impartial method was to use and rely on authentic and official government enumeration lists. The Voters' List containing a list of all adult population eligible to respond to survey questions was considered ideal in this situation. Hence, the latest voter's list was collected for each of the villages from the Panchayat/ Block Development Offices at the village/ block level.

Step 3

Once the sample size was computed, a method of Systematic Random Sampling was utilized to select the specific households to be interviewed from the village from the Voters' Lists. Systematic random sampling is used in cases where there is a large population to be sampled from the total population and avoid any kind of bias in selection. Systematic sampling is the method of selecting individuals at regular interval from the list (in the sampling frame), only the starting point being selected at random.

Example: After obtaining the sample size for each village as illustrated in the image, the Voters' List was then sought from the local authorities. The steps that were followed to draw the sample are as mentioned below:

Number of Households: 395

Sample Size: 78 + 40% = 40/100*78 + 78 = 109 (40% was additional sample drawn)

Population: 1975

Family size: 1975/ 395 = 5 (average family size followed in GoI research study standards) Voters: 1500

Sample Interval: 1500/78 = 13.76 = 14 (The interval should be higher than 5 i.e. number of members per household)

Random sample: 3

Hence, every 14th person after Voter no. 3 will be part of the study that is 3, 17, 31...109 will be drawn as sampled respondents for the study.

The additions, deletions, modifications in the Voters' List will also be included, deleted, modified prior to beginning the process of drawing out samples from the List.

2.3.1. MULTI-STAGE SAMPLING FOR SPECIFIC LOCATIONS

For certain locations like Kerala, and Municipal areas in other locations the researchers had to employ slightly different approach for the sampling frame. In Kerala for instance, the numbers do not adhere strictly to village or cities, as the rural-urban divide with the developmental and socio-political scenario is blurred. So given the numbers and size of the villages in Kerala according to the Census data and discussion with the Block and Panchayat officials on-field, the sampling for this location was altered to achieve the target in the given time frame. Although the methodology and technique used was the same; Multi-Stage sampling approach was used to draw the sample. Each village, administratively, is divided into several wards. So as the first stage, two to three wards from each village were selected through systematic random sampling. In the next stage, selection of households was done from each ward by using the same method of sampling. The questionnaire was then administered to these sampled households.

2.4. TOOLS OF THE STUDY – SURVEY INSTRUMENTS

Primarily the tools employed in the core investigation were quantitative tools; a Household Questionnaire and a Village-level Questionnaire.

2.4.1. Household Questionnaire: The household questionnaire was used to seek information from a sample of households in the location about their socioeconomic background, housing and sanitation, demographic characteristics, recent births related information, morbidity, health seeking behaviour, occupation, vocational skills possessed, credit patterns, and access to PDS etc.

2.4.2. Village-level Questionnaire: This questionnaire was administered to all villages as per the list provided by the company. The information obtained in this questionnaire was about facilities available in and around the villages such as schools, aanganwadis and PHCs, social institutions like Mahila mandals, SHGs and farmers clubs, activities undertaken by companies (under CSR) and other NGOs, and felt needs of the villages. The information was obtained by visiting the functionaries of the village level institutions such as Panchayat representatives and officials, school principal and teachers, aanganwadi worker, non-formal leaders and informal discussion with a cross-section of village authorities and key people.

Both the questionnaires included one open-ended question inquiring about the major problems in the village. This was added so as to give space and flexibility to the respondents to give their understanding of the problems as well as possible solutions from the villagers' perspective of the issues as it is believed that the sample population and village officials can provide an insider's view to the needs of the village as well as the resolution of the same.

2.5. DATA COLLECTION

The data collection for the survey was initiated with a team of eight professionals with two Programme Officers and six Research Investigators at all the locations. The targeted numbers of households were identified from the Voters' Lists which were accessed by the team from Office of the Chief Electoral Officer, website of the respective state and the number of households were finalised from the Census data which was of 2001. The gaps from 2001 and 2011 data were identified and sorted out during the initial field visit in every village. These visits were made to all the villages to inform the locals about data collection and to take official 2011 (if available) data from the Panchayat to finalise the sample from Voters' List.

The data collection was completed in 5 to 7 villages from each location in 8 to 10 days. All the questionnaires filled by investigators were scrutinized each day by the TISS Programme Officers to check it for proper entry and clearing the doubts. If questionnaires were eliminated for improper data entered or any other issues, the sample number was taken care of beforehand by drawing additional sample. Apart from Household Questionnaires, TISS PO and Local PO collected data for Village Questionnaires with a multi-stakeholder approach. The questionnaires

were administered on key Panchayat officials, teachers, doctors and other relevant persons to obtain the necessary information. It was needed to find out the available facilities and accessibilities.

2.6. DATA ENTRY

After the completion of data entry, the questionnaires were checked and the additional/ qualitative responses were translated from regional languages to English for data entry purposes. Software called "Census and Survey Processing System" (CS Pro) was used for data entry which is a widely used software for quantitative data. The data was then exported to Statistical Product and Service Solutions (SPSS) for data analysis purposes.

2.7. DATA INTERPRETATION AND ANALYSIS

Baseline survey is a quantitative study with a selected sample of households in each of the locations. The data collected from the households and village key informants was then entered in SPSS, statistical software, for further data interpretation. This data was used to conduct village as well as household specific analysis represented through indices for clear understanding. The indices are a tabular representation of the analysed data in percentages or numbers.

The primary data received through the survey itself was corroborated with the secondary data obtained from various sources to complete the analysis in a wholesome manner.

2.8. COORDINATION OF THE PROJECT

To maintain the quality and uniformity of the project, all the stages of the entire project from budgeting, study design, data collection, data entry, data analysis, and report writing was coordinated, closely monitored and conducted by two Programme Managers under the close guidance of the Project Director. Faculty Guidance from expert faculty in TISS was sought for design and methodology of the study. The data collection was coordinated by nine Programme Officers as well as preparation of the study, data analysis; report writing was also done under the guidance of the two Project Coordinators. The officials of IOCL were involved in the project to coordinate the processes of the study from the company.

CHAPTER 3: VILLAGE DEMOGRAPHICS

Village Profile							
Village 1: Bhimri							
	Sources: Primar	y Baseline Data - Village Questionnaire	e, Census of India 2001				
District	Sangrur	Block	Bhawanigarh				
Taluka	Sangrur	Village	Bhimri				
		Panchayat	Bhimri				
Demographics		Sampled Households	57				
Population	1000	Number of Households	175				
Scheduled Caste	51.8%	Hindu HHs	0%				
Scheduled Tribe	0%	Sikh HHs	100%				
Other Backward Class	7.1%	Christian HHs	0%				
General	41.1%	Other HHs	0%				
Major Castes		Major Tribes					
Jatt Sikh							
Majbi Sikh							
Ramdasiya Sikh							
Basic Amenities		Land Details (in Acres)					
Total public/ common tap points	1	Total land	587				
Household tap connections	70	Residential land	7				
Major source of water	1. Private tap	Agricultural land	560				
(Ranked in the order of usage)	2. Own Govt tap	Total Non-irrigated land					
		Total irrigated land	560				
		Waste Land	20				
Community toilet	0						
		Important Towns					
Type of House (Largest two)	1. RCC	Nabha (10 km)					
	2. Semi -pucca	Bhawanigarh (10 km)					
Sources of Fuel in Use (Largest	1. Grass/ crop residue/						
two	wood – 98.1%						
two)	2. Cow dung – 89.3%						

Village Profile							
Village 2: Phumanwal							
Sources: Primary Baseline Data - Village Questionnaire, Census of India 2001							
District	Sangrur	Block	Bhawanigarh				
Taluka	Sangrur	Village	Phumanwa				
		Panchayat	Phumanwa				
Demographics		Sampled Households	74				
Population	1788	Number of Households	310				
Scheduled Caste	24.3%	Hindu HHs	8.1%				
Scheduled Tribe	0%	Sikh HHs	89.2%				
Other Backward Class	17.6%	Muslim HHs	2.7%				
General	58.1%	Other HHs	0%				
Major Castes		Major Tribes					
Jatt Sikh							
Majbi Sikh							
Ramdasiya Sikh							
Basic Amenities		Land Details (in Acres)					
Total public/ common tap points	1	Total land	6000				
Household tap connections	80	Residential land					
Major source of water	1. Private tap	Agricultural land	5000				
(Ranked in the order of usage)	2. Own Govt tap	Total Non-irrigated land	800				
		Total irrigated land	4200				
		Waste Land	30				
Community toilet	0						
		Important Towns					
Type of House (Largest two)	1. Semi- pucca	Nabha (13 km)					
	2. RCC	Bhawanigarh (13 km)					
Sources of Fuel in Use (Largest	1. Grass/ crop residue/ wood – 100%						
two)							
	2. Cow dung – 100%						

Village 3: Kila Bariyan							
Sources: Primary Baseline Data - Village Questionnaire, Census of India 2001							
District Sangrur Block							
Taluka	Sangrur	Village	Kila Bariyaı				
		Panchayat	Kila Bariyar				
Demographics		Sampled Households	94				
Population	2400	Number of Households	600				
Scheduled Caste	19.4%	Hindu HHs	3.2%				
Scheduled Tribe	0%	Sikh HHs	96.8%				
Other Backward Class	5.3%	Muslim HHs	0%				
General	75.3%	Other HHs	0%				
Major Castes		Major Tribes					
Jatt Sikh							
Majbi Sikh							
Ramdasiya Sikh							
Basic Amenities		Land Details (in Acres)					
Total public/ common tap points	20	Total land	7500				
Household tap connections		Residential land	100				
Major source of water	1. Private tap	Agricultural land	7400				
(Ranked in the order of usage)	2. Own Govt tap	Total Non-irrigated land					
		Total irrigated land	7400				
		Waste Land					
Community toilet	0						
		Important Towns					
Type of House (Largest two)	1. Semi -pucca	Longowal (5 km)					
	2. RCC	Sangrur (12 km)					
Sources of Fuel in Use (Largest	1. Grass/ crop residue/						
two)	wood – 97.8%						
	2. Cow dung – 93.5%						

	Village Profi	ile					
Village 4: Masani							
Sources: Primary Baseline Data - Village Questionnaire, Census of India 2001							
District	Sangrur	Block	Bhawanigarh				
Taluka	Sangrur	Village	Masani				
		Panchayat	Masani				
Demographics		Sampled Households	64				
Population	450	Number of Households	80				
Scheduled Caste	40.6%	Hindu HHs	4.7%				
Scheduled Tribe	0%	Sikh HHs	95.3%				
Other Backward Class	10.9%	Muslim HHs	0%				
General	48.5%	Other HHs	0%				
Major Castes Jatt Sikh Majbi Sikh Ramdasiya Sikh		Major Tribes					
Basic Amenities		Land Details (in Acres)					
Total public/ common tap points	2	Total land	310				
Household tap connections	15	Residential land	7				
Major source of water	1. Private tap	Agricultural land	300				
(Ranked in the order of usage)	2. Own Govt tap	Total Non-irrigated land					
		Total irrigated land	300				
		Waste and Grazing Land	3				
Community toilet	0						
Type of House (Largest two)	1. Semi-pucca 2. RCC	Important Towns Nabha (18 km) Bhawanigarh (10 km) Sangrur (32 km)					
Sources of Fuel in Use (Largest two)	1. Grass/ crop residue/ wood – 96.9% 2. Cow dung – 95.3%						

Village 5: Rajpura							
Sources: Primary Baseline Data - Village Questionnaire, Census of India 2001							
District Sangrur Block Bhawanigarh							
Taluka	Sangrur	Village	Rajpura				
Tatuka	Sangru	Panchayat	Rajpura				
Demographics		Sampled Households	64				
Population	1500	Number of Households	200				
Scheduled Caste	26.6%	Hindu HHs	6.2%				
Scheduled Tribe	0%	Sikh HHs	89.1%				
Other Backward Class	17.2%	Muslim HHs	4.7%				
General	56.2%	Other HHs	0%				
Major Castes		Major Tribes					
Jatt Sikh							
Majbi Sikh							
Ramdasiya Sikh							
Basic Amenities		Land Details (in Acres)					
Total public/ common tap points	3	Total land	700				
Household tap connections	50	Residential land	30				
Major source of water	1. Private tap	Agricultural land	660				
(Ranked in the order of usage)	2. Own Govt tap	Total Non-irrigated land					
		Total irrigated land	660				
		Waste Land	10				
Community toilet	0						
		Important Towns					
Type of House (Largest two)	1. Semi-pucca	Bhawanigarh (10 km)					
	2. RCC	Sangrur (30 km)					
Sources of Fuel in Use (Largest	1. Grass/ crop residue/						
two)	wood – 98.4%						
	2. Cow dung – 98.4%						

	Village Profi	le					
Village 6: Paharpura							
Sources: Primary Baseline Data - Village Questionnaire, Census of India 2001							
District	Kaithal	Block	Siban				
Taluka	Siban	Village	Paharpura				
		Panchayat	Paharpura				
Demographics		Sampled Households	75				
Population	2500	Number of Households	400				
Scheduled Caste	84%	Hindu HHs	84%				
Scheduled Tribe	0%	Sikh HHs	16%				
Other Backward Class	16%	Muslim HHs	0%				
General	0%	Other HHs	0%				
Major Castes Bazigar Kamboj Dalit		Major Tribes					
Basic Amenities		Land Details (in Acres)					
Total public/ common tap points	10	Total land	300				
Household tap connections	200	Residential land					
Major source of water	1. Own Govt tap	Agricultural land	200				
(Ranked in the order of usage)	2. Private tap	Total Non-irrigated land					
		Total irrigated land	200				
		Waste Land					
Community toilet	0						
		Important Towns					
Type of House (Largest two)	1. Semi -pucca	Siban (8 km)					
	2. RCC	Kaithal (25 km)					
Sources of Fuel in Use (Largest	1. Grass/ crop residue/						
two)	wood – 100%						
	2. Cow dung – 100%						

	Village 7: Janed	pur	
		• y Baseline Data - Village Questionnaire, (Census of India 200
District	Kaithal	Block	Siba
Taluka	Siban	Village	Janedpu
		Panchayat	Janedpu
Demographics		Sampled Households	59
Population	2200	Number of Households	350
Scheduled Caste	62.7%	Hindu HHs	57.6%
Scheduled Tribe	0%	Sikh HHs	42.4%
Other Backward Class	35.6%	Muslim HHs	0%
General	1.7%	Other HHs	0%
Major Castes		Major Tribes	
Bazigar			
Balmiki			
Chimber			
Basic Amenities		Land Details (in Acres)	. –
Total public/ common tap points	1	Total land	170
Household tap connections	200	Residential land	-
Major source of water	1. Own Govt tap	Agricultural land	135
(Ranked in the order of usage)	2. Private tap	Total Non-irrigated land	35
		Total irrigated land	100
		Waste Land	-
Community toilet	0	· · · · · · · · · · · · · · · · · · ·	
Type of House (Largest two)	1. Semi -pucca	Siban (8 km)	
	2. RCC	Kaithal (25 km)	
Sources of Fuel in Use (Largest	1. Grass/ crop residue/		
two)	wood – 98.3%		
	2. Cow dung – 98.3%		

CHAPTER 4: SANGRUR, PUNJAB: An In-depth Analysis

This is the Final Report of the Baseline Survey for IOCL conducted in Sangrur, Punjab by National CSR Hub, TISS for IOCL to identify possible areas of CSR intervention. This report is a product of the extensive survey undertaken in five villages of Sangrur and in two villages of Kaithal district.

The following tables throughout the report will have various indices or thematic areas like Household information – religious composition, caste composition, literacy, sanitation, water, livelihood, infrastructure, etc. across the seven villages. Each of the tables have been explained with the significant information pertaining to the villages and these tables also provide a benefit of comparative analysis across these seven villages in terms of their socio-economic condition in each area one panoramic view of the location. This in-depth analysis is followed by the very significant chapter on *'Possible Areas of Intervention'* that is the problems and recommendations that are common to all villages as well as specific issues and suggested resolutions are defined.

Table 1: DEMOGRAPHIC & HOUSING CHARACTERISTICS								
		Village 1 Bhimri	Village 2 Phumanwal	Village 3 Kila Bariyan	Village 4 Masani	Village 5 Rajpura	Village 6 Paharpura	Village 7 Janedpur
Religious	Hindu	0	8.1	3.2	4.7	6.2	84	57.6
Composition	Muslim	0	2.7	0	0	4.7	0	0
(%)	Sikh	100	89.2	96.8	95.3	89.1	16	42.4
	Scheduled Caste	51.8	24.3	19.4	40.6	26.6	84	62.7
	Scheduled Tribe	0	0	0	0	0	0	0
Category (%)	Other Backward Classes	7.1	17.6	5.3	10.9	17.2	16	35.6
	General	41.1	58.1	75.3	48.5	56.2	0	1.7
	1	Jatt Sikh	Jatt Sikh	Jatt Sikh	Jatt Sikh	Jatt Sikh	Bazigar	Bazigar
	2	Majbi Sikh	Majbi Sikh	Majbi Sikh	Majbi Sikh	Majbi Sikh	Kamboj	Balmiki
		Ramdasi	Ramdasiya	Ramdasi	Ramdasi	Ramdasi		
	3	ya Sikh	Sikh	ya Sikh	ya Sikh	ya Sikh	Dalit	Chimber
Major Castes	3						Dalit Adiwasi	Chimber Kamboj
Major Castes		ya Sikh	Sikh	ya Sikh	ya Sikh	ya Sikh		
Major Castes	4	ya Sikh Gujjar	Sikh Kumhar	ya Sikh Lohar	ya Sikh Brahmin	ya Sikh Khan		Kamboj
Major Castes	4 5	ya Sikh Gujjar	Sikh Kumhar Brahmin	ya Sikh Lohar	ya Sikh Brahmin Majhi	ya Sikh Khan Kumhar		Kamboj Singh
Major Castes	4 5 6	ya Sikh Gujjar	Sikh Kumhar Brahmin Nath	ya Sikh Lohar	ya Sikh Brahmin Majhi Mistri	ya Sikh Khan Kumhar Shimbe		Kamboj Singh
Major Castes	4 5 6 7	ya Sikh Gujjar	Sikh Kumhar Brahmin Nath Lohar	ya Sikh Lohar	ya Sikh Brahmin Majhi Mistri Gheer	ya Sikh Khan Kumhar Shimbe Jheer		Kamboj Singh
Major Castes Major Tribes	4 5 6 7	ya Sikh Gujjar	Sikh Kumhar Brahmin Nath Lohar	ya Sikh Lohar	ya Sikh Brahmin Majhi Mistri Gheer	ya Sikh Khan Kumhar Shimbe Jheer		Kamboj Singh

4.1 DEMOGRAPHIC & HOUSING CHARACTERISTICS

Type of House (%)	RCC	41.1	37.8	34.4	28.1	28.1	25.3	30.5
	Pucca	25	13.6	23.7	25	20.3	2.7	13.6
	Semi Pucca	33.9	48.6	41.9	46.9	51.6	72	54.2
	Kuccha	0	0	0	0	0	0	0
	Hut	0	0	0	0	0	0	1.7
	Owned	100	97.3	98.9	100	100	100	94.9
TT	Rented	0	0	0	0	0	0	1.7
House Ownership (%)	Rent Free	0	0	1.1	0	0	0	1.7
Ownersnip (70)	Subsidized/ Allotted under scheme	0	2.7	0	0	0	0	1.7
Electricity (%)		100	98.6	97.8	100	98.4	98.7	100
	Grass / Crop Residue / wood	98.1	100	97.8	96.9	98.4	100	98.3
	Cow dung	89.3	100	93.5	95.3	98.4	100	98.3
	Coal / Charcoal	0	0	1.1	0	0	0	0
	Kerosene	0	0	0	0	0	0	1.7
Fuel (%)	Bio Gas	0	5.4	8.6	4.7	7.8	1.3	3.4
	Solar Energy	0	0	0	0	0	0	0
	LPG / Natural Gas	60.7	56.8	61.3	59.4	78.1	16	32.2
	Electricity	0	0	1.1	0	0	0	0
	Other	0	0	0	0	0	0	0

DEMOGRAPHIC AND HOUSING CHARACTERSTICS

The survey is conducted in seven villages of two districts Sangrur and Kaithal. As per the Census of India, 2011 it is found that among seven surveyed villages the population graph varies from 450 to 2500 persons. In Paharpur maximum population is 2500 followed by Kila Bariyan 2400 and minimum is 450 in Masani. The average family size across the seven villages is 6, while it is also analyzed that Janedpur, Kila Bariyan and Phumanwal also have some families with more than 15 members. All the villages are dominated by Sikh religion except Paharpur and Janedpur where the dominance is of Hindu religion. In five villages nearly 90% of the population is of Sikh religion while in two villages Janedpur and Paharpur have more than 55% of the population belongs to Hindu religion. In two villages Rajpura and Phumanwal a small percentage of Muslim religion is also found. Around 84% of the sampled population in Paharpura belongs to SC category followed by Janedpur (62.7%) and lowest is 19.4% in Kila Bariyan. In SC category, caste groups such as Majbi and Ramdasiya Sikh are in majority across five villages of district Sangrur whereas castes such as Bazigar and Balmiki are in majority across two villages of Kaithal (Janedpur and Paharpur). In Kila Bariyan, 75.3% of the sampled population belongs to General category followed by Phumanwal (58.1%). It is also analyzed that in Paharpur none of the sampled population belongs to General category. Mainly Jaat Sikh is the caste that comes under General category. The findings also show that sampled villages have population that belongs to OBC which is analyzed highest in Janedpur with 35.6% and lowest in Kila Bariyan with 5.3%. The castes such as Kamboj, Lohar, Nath and Prjapati come under OBC.

Moving on to the type of houses they reside in, it is found that in Kila Bariyan the whole sampled population that belongs to SC category resides only in semi-pucca houses also. Nearly 30% of the population belongs to OBC and General category also resides in semi-pucca houses. In Janedpur village 78.4% of the SC families reside in the semi-pucca houses and 71.4% of the OBC families resides in RCC houses. It is also found that 2.7% of the population belonging to SC also lives in hut. In Paharpur village nearly 80% of the SC families and 40% of OBC families lives in semi-pucca houses. In this village majority of the population from any caste/ category resides in semi-pucca house settings. In Rajpura below than 30% of the population resides in RCC houses while nearly half of the population resides in semi-pucca houses and 13% of the population resides in pucca houses. The data also reflects that nearly 70% of the population from SC and OBC and 36.1% of the population from General category resides in

semi-pucca houses. In rest of the villages: Phumanwal, Masani and Bhimri nearly half of the population resides only in semi pucca houses and less than 30% of the population resides in pucca houses irrespective of the caste category. It is also analyzed that almost in every village nearly 97% of the houses are electrified and nearly 95% of the house are owned by the families resides in it.

It is to be noted that ill effects of using grass/crop residue / wood and cow dung as a fuel for cooking causes lots of health problems to females. These sources of fuels are used by 90% of the population in all the sampled villages. The use of these traditional mud *chullas* has not decreased in any of the village but a significant increase in the most efficient fuel of the country LPG is also noticed as more than 50% of the population in five villages except Janedpur and Paharpur reported use of LPG cylinders along with *chullas*. Alone in Rajpura 78.1% of the population is using LPG while least users are 16% in Paharpur. Apart from this, a small portion of the population also found to be using biogas as a fuel for cooking in six villages except Bhimri, though it is not used regularly by the households are also reported by the participants who use biogas.

4.2 LITERACY & EDUCATIONAL STATUS

Table 2: LITERACY & EDUCATIONAL STATUS								
		Village 1 Bhimri	Village 2 Phumanwal	Village 3 Kila Bariyan	Village 4 Masani	Village 5 Rajpura	Village 6 Paharpura	Village 7 Janedpur
Literacy Level (%)		71.8	63.6	59.2	71	69.6	59.2	61.2
Currently Studying (%)		62.8	69.6	61.9	71.4	73.5	66.7	64
Children studying	Government	64.5	48.7	47.5	46.3	53	83.8	61.5
in Type Of Institution (%)	Private Aided	35.5	51.3	52.5	53.7	46	16.2	38.5
	Private Un-Aided	0	0	0	0	1	0	0
Mode Of Travel	Walk	26.3	20.5	40.8	29.5	25	79.2	49
(%)	Bicycle	25	27.4	2.5	12.6	20	0	3.8
	Scooter / Bike	9.2	0	0	1.1	2	0.8	0
	Auto / Taxi / Cycle Rickshaw	7.9	5.1	2.6	3.2	4	0	0
	Bus	31.6	47	54.1	53.6	49	20	47.2
Mid - Day Meal	No Meals	31.6	26.8	25	25	12.5	25.3	21.7
(%)	Once a Week	0	0	0	0	0	2.1	0
	Few Days a Week	21.1	0	2.5	0	0	0	0
	All the Days	44.7	70.8	47.5	66.7	65.6	71.5	78.3
	No Response	2.6	2.4	25	8.3	21.9	1.1	0
Reasons of Dropout	To work and support	38.5	26.7	12.5	9.1	14.3	20	5.3

(%)	household							
	Required to attend domestic chores	0	6.7	6.2	0	0	4	0
	Education / Higher Education not considered important	0	0	12.5	0	0	0	0
	Too poor in studies / failed / Irregular to school	15.4	13.3	6.2	9.1	14.3	8	10.5
	School to far / Sending girls not safe	15.4	13.3		9.1	28.6	4	10.5
	Poor quality of teaching / teachers not available or rude	0	0	18.8	0	0	0	0
	Too high fee / expenses	15.4	0	0	0	0	0	15.8
	Frequent shifting of residence	0	0	0	0	0	0	
	Physical / Mental disability / illness	0	0	6.3	9.1	0	0	10.5
	Quit education due to early marriage	0	0	0	9.1	0	8	0
	No Response	15.3	40	37.5	54.5	42.8	56	47.4

LITERACY AND EDUCATIONAL STATUS

The average literacy level in the surveyed villages comes out to be 65.1% with it being highest in Bhimri at 71.8% and lowest in Kila Bariyan and Paharpur both at 59.2%. The status of currently studying is noticed higher in Rajpura at 73.5% followed by Masani at 71.4% and the least in Bhimri at 62.8%. The currently studying status analyzed higher in Rajpura because of the availability of private secondary school in the village premises. However percentage is showing more numbers of students are going to government schools than private schools. The data in the table shows that 83.8% of the students of Paharpura go to government school which is followed by Bhimri (64.5%) and Janedpur (61.5%) and the lowest is 46.3% in Masani. In Phumanwal, Masani and Kila Bariyan more than 50% Of the students go to private schools. The mode of travelling used by students are buses or by walking. In Kila Bariyan more than half of the students use bus to reach the educational institutes followed by Masani (53.6%) and in Pharpura only 20% of the students use bus to reach the schools which are at a distance of more than 5 Km. Government middle school up to 8th standard is in the village. Therefore, till 8th class there is less or no dropouts, but after 8th standard there are few students who choose to study, as higher secondary schools are more than 5 Km away and due to the weak financial conditions and less transport facilities they quit the further studies. In Bhimri nearly 40% of the students quit study to support the family financially. It is noticed that majority of people quit study across the seven villages just to work and to support the family. It is also analyzed that in all the sampled villages the dropout rate of male students are more than female students. The interventions are required to promote the higher education among the youth as there are less than 20% youth found who either pursed or pursing higher studies with lowest 3.9% at Paharpur and highest 20% at Rajpura.

The MDM scheme of the government to provide daily meals to the students up to 8th standard is also functioning in the government schools. In five villages except Bhimri and Kila Bariyan more than 65% of the students in each village received daily meals. In Bhimri nearly 30% of the students reported of not receiving any kind of meal while nearly 20% received few days a week. It is analysed that average of 22.8% of the students in six villages except Bhimri have not received any meal with it being highest in Phumanwal (26.8%) and lowest in Rajpura (12.5%).

4.3 VOCATIONAL TRAINING

	Table 3: VOCATIONAL TRAINING											
		Village 1 Bhimri	Village 2 Phumanwal	Village 3 Kila Bariyan	Village 4 Masani	Village 5 Rajpura	Village 6 Paharpura	Village 7 Janedpur				
Received Vocational Training (frequency)		3	3	1	1	8	0	2				
	Computer / TV / Electronics	0	2	1	0	2	0	1				
	Home Appliances	0	0	0	0	0	0	0				
Modern skills (frequency)	DTP Centre / Xerox / Book Binding / Screen Printing and related work	0	0	0	0	0	0	0				
	Catering / Bakery / Hotel- related	0	0	0	0	0	0	0				
	Tuition / Training – Related	1	0	0	0	0	0	0				
Household	Tailoring / Embroidery / Weaving / Dying / Spinning / Textile – related	2	0	0	1	6	0	1				
(frequency)	Toy / Decoration – Related	0	0	0	0	0	0	0				
	Beedi / Agarbatti / Soap / Home use Item Making	0	0	0	0	0	0	0				

	Basket / Carpet / Home Utensils making	0	0	0	0	0	0	0
	Papad / Sweet / Eatable Making	0	0	0	0	0	0	0
	Thresher / Harvester / Tractor operation	0	0	0	0	0	0	0
	Horticulture / Sericulture training	0	0	0	0	0	0	0
Agriculture (frequency)	Progressive Farming Techniques	0	0	0	0	0	0	0
	Insecticide / Spraying - related Operations	0	0	0	0	0	0	0
	Food Processing	0	0	0	0	0	0	0
	Driving Vehicles	0	0	0	0	0	0	0
Service	Photography	0	1	0	0	0	0	0
(frequency)	Health Care	0	0	0	0	0	0	0
	Beautician Services	0	0	0	0	0	0	0
	Motor Mechanic	0	0	0	0	0	0	0
	Welding / Electrical Repair Work	0	0	0	0	0	0	0
Small Scale (frequency)	Jewellery or Bead Making	0	0	0	0	0	0	0
	Construction Related Work	0	0	0	0	0	0	0
Traditional	Cobbling	0	0	0	0	0	0	0

(frequency)	Leather – Related work	0	0	0	0	0	0	0
	Carpentry	0	0	0	0	0	0	0
	Masonry	0	0	0	0	0	0	0
	Pottery	0	0	0	0	0	0	0
	Stone Craving	0	0	0	0	0	0	0
	Wood Craving	0	0	0	0	0	0	0
	Metal Work	0	0	0	0	0	0	0
	NGO	2	0	0	1	3	0	0
	Government	0	0	0	0	1	0	0
Agency Provided	Charity Organization	1	3	0	0	0	0	0
Training (frequency)	No Response	0	0	0	0	3	0	1
(Inequency)	Under CSR / By Company	0	0	1	0	1	0	1
	Wage Employed	2	0	0	0	1	0	0
	Self Employed	0	1	1	0	4	0	1
Engagement	Both	0	0	0	0	1	0	0
(frequency)	Pursuing	0	1	0	0	0	0	1
	Not Engaged	1	1	0	1	2	0	0
	Financial Constraints	0	0	0	0	0	0	0
	Time Constraints	1	0	0	0	2	0	0
Reasons of Non-	Marketing Problem	0	0	0	0	0	0	0
Engagement	Labour Problem	0	0	0	0	0	0	0
(frequency)	Electricity Problem	0	0	0	0	0	0	0
	Raw Material Problem	0	0	0	0	0	0	0
	Familial Problems	0	0	0	0	0	0	0

Complying Rules & regulations	0	0	0	0	0	0	0
Shifted to better income source	0	0	0	0	0	0	0
Not in Demand	0	1	0	0	0	0	0
Married & changed work	0	0	0	0	0	0	0
Familial responsibilities	0	0	0	1	0	0	0
Financial Constraints	0	0	0	0	0	0	0
None	0	0	0	0	0	0	0

VOCATIONAL TRAINING

All the sampled villages except Paharpura have access to vocational training courses in the last three years, although the numbers suggest a very small portion of the population have benefited from these. The highest number of beneficiaries is in Rajpura where 8 respondents claimed to receive vocational training in areas such as tailoring/ embroidery and computer & electronics. The other five villages: Bhimri and Phumanwal have 3 beneficiaries each, Janedpur have 2 beneficiaries while in Kila Bariyan and Masani each has only 1 beneficiary. In Phumanwal , Kila Bariyan and Janedpur total of 2 ,1 , 1 beneficiaries respectively have received training in computer/ electronics/ mobile repairing and Janedpur, and in Bhimri, Masani, Janedpur total of 2, 1, 1 beneficiaries respectively claimed to receive vocational training in tailoring/ embroidery.

Different agencies are found to be providing vocational training courses. Three beneficiaries from Kila Bariyan and 2 from Bhimri have received their training from NGO. In Phumanwal and Bhimri, 3 and 1 beneficiary respectively claimed to receive their training from a charity organisation. Apart from this, government institutes and companies under CSR are the other agencies providing vocational training to the villagers.

It is clear from the data that those who received vocational training across the seven villages are engaged in some kind of income generation activities. It is found that only in Rajpura 2 beneficiaries are not engaged in any kind of work while in other villages except Janedpur, only one beneficiary from each village are not engaged in any kind of income generation activity. The time constraint was reported as the main problem by the beneficiaries of the vocational training in Rajpura and Bhimri while familial responsibilities and less demand of work are also reported by the beneficiaries of Masani and Phumanwal respectively.

Table 4: WATER RESOURCES, SANITATION & HYGIEN												
			Village 1 Bhimri	Village 2 Phumanwal	Village 3 Kila Bariyan	Village 4 Masani	Village 5 Rajpura	Village 6 Paharpura	Village 7 Janedpur			
	Own Private Tap		83.2	77	76.3	65.7	51.5	26.7	37.3			
	Own Govt. Tap		7.1	17.6	20.4	21.9	46.9	68	47.5			
	Own Hand Pump		1.8	0	0	0	0	0	1.7			
	Own Open Well		0	0	0	0	0	0	0			
	Neighbour's Tap		5.4	2.7	5.4	9.4	3.1	2.7	1.7			
Water Facility	Community Tap		3.6	9.5	1.1	3.1	0	5.3	11.9			
(%)	Community Hand Pump		0	0	0	0	0	0	0			
	Community Open Well		0	0	0	0	0	0	0			
	Own Submersible		0	0	0	0	0	0	0			
	Tank / Pond		0	0	0	0	0	0	0			
	Stream / River		0	0	0	0	0	0	0			
	Borewell		0	0	0	0	0	0	1.7			
	Tube well		0	0	0	0	0	1.3	5.1			
	Tanker Water		0	0	0	0	0	0	0			
	D 11				20			10				
Number of	Public		1	1	20	2	3	10	1			

4.4 WATER RESOURCES, SANITATION & HYGIENE

Common / Public Taps and Individual Taps	Individual		70	80		15	50	200	200
	Own Flush	-	8.9	16.2	14	7.8	21.9	2.7	13.6
	Own Pit		89.3	67.6	78.5	84.4	70.3	65.3	47.5
Type of Toilet (%)	Community Flush		0	0	0	0	0	0	0
(70)	Community Pit		0	0	0	0	0	0	1.7
	ODS		1.8	16.2	7.5	7.8	7.8	32	37.2
	Fully Owner		85.5	98.4	87.2	79.7	94.9	94.1	100
Toilet	Shared By HH	-	0	0	0	0	0	0	0
Construction	Subsidy		10.9	0	3.5	6.8	1.7	5.9	0
Expense (%)	Govt. and NGO Expense	-	3.6	1.6	9.3	8.4	3.4	0	0
People	Yes, If Free	-	0	33.3	42.9	40	60	36.4	24.1
Interested in a Private toilet	Yes, If Subsidized		100	66.7	57.1	60	40	63.6	51.8
Facility (%)	Not Interested		0	0	0	0	0	0	24.1
	No Response		0	0	0	0	0	0	0
Number of Community Toilets			0	0	0	0	0	0	0
1011015									

	None	Respondent	5.4	8.1	9.7	4.7	9.4	2.7	1.7
	None	Observer	0	0	0	0	0	0	0
	Water	Respondent	8.9	9.5	12.9	14.1	9.4	10.7	3.4
	Stagnation	Observer	12.5	8.1	9.7	15.6	9.4	6.7	3.4
	Drainage /	Respondent	23.2	33.8	29	37.5	35.9	30.7	35.6
Problem of	Sewage	Observer	23.2	29.7	30.1	31.2	31.2	34.7	25.4
Sullage	Cattle Waste —	Respondent	48.2	52.7	61.3	51.6	25	49.3	52.5
Nuisance (%)		Observer	62.5	82.4	82.8	73.4	59.4	66.7	79.7
	OAD (Open	Respondent	0	5.4	0	0	3.1	5.3	1.7
	Air Defecation)	Observer	0	5.4	1.1	0	3.1	5.3	3.4
	Waste	Respondent	89.3	77	82.8	76.6	65.6	72	72.9
	Dumping	Observer	96.4	89.2	89.2	87.5	87.5	89.3	89.8

WATER RESOURCES, SANITATION AND HYGIENE

The main resource of water in all the surveyed villages is own private taps which are highest in use at Bhimri with 83.2% followed by Kila Bariyan (76.3%) and the lowest in Paharpura where only 26.7% of the sampled population use own private taps. Though the presences of government taps are marked in all the surveyed villages but the habitants of Paharpura and Janedpur have found to be mainly dependent on them. A few portion of the population in all the surveyed villages also use neighbour's tap and community taps to meet the requirement of water in the household chores. The available data showed that in all the sampled villages at least one community tap point is present which is used by the habitants.

Talking about the type of toilet facility, it is analysed that both pit and flush toilets are present but the percentage of flush toilets is less as compare to pit toilets. Only in Rajapura, 21.9% of the population is using flush toilets while an average of 71.8% of the population in all the villages use pit toilets with highest in Bhimri (89.3%) and lowest reported in Janedpur (47.5%). There are only two villages Paharpura and Janedpur where open air defecation is practiced by nearly 30% of the population residing in semi-pucca houses. The habitants who do not have any kind of toilet facility across the seven villages are mainly interested in constructing flush toilets if subsidies are being provided to them.

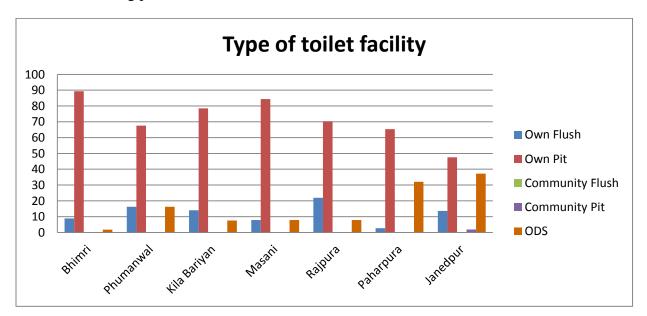


Figure 1: Type of Toilet Facility

It is also analyzed that a small portion of the population have received subsidies from government under Total Sanitation Campaign (TSC) for the construction of the toilets except two villages; Phumanwal and Janedpur but still open air defecation is practiced in all the villages though the numbers is small. As for the sullage nuisance, mainly cattle waste, waste dumping and drainage problems are seen as a major threat to the sanitation of these villages which requires immediate attention so that the villages remain safe from the disease such as malaria, dengue and typhoid.

Table 5: HEALTHCARE FACILITIES & BIRTH DETAILS											
		Village 1 Bhimri	Village 2 Phumanwal	Village 3 Kila Bariyan	Village 4 Masani	Village 5 Rajpura	Village 6 Paharpura	Village 7 Janedpur			
	Traditional Healer/ Dai	0	0	0	0	0	0	0			
	Local Doctor/ RMP	50	93.2	96.8	39.1	73.4	98.7	96.6			
	Chemist Shop	3.6	4.1	0	1.6	1.6	1.3	0			
	Mobile Clinic	0	0	0	0	1.6	0	0			
	SHC/ ASHA/ Aanganwadi	0	0	0	0	1.6	0	0			
Primary Mode of	PHC/CHC	8.9	0	0	23.4	1.6	0	0			
Treatment (%)	Government Hospital	1.8	0	0	3.1	3	0	0			
	Private Clinic	35.7	2.7	3.2	32.8	12.5	0	0			
	Private Hospital	0	0	0	0	4.7	0	3.4			
	CSR Hospital	0	0	0	0	0	0	0			
	No Treatment	0	0	0	0	0	0	0			
	Depends on Ailment	0	0	0	0	0	0	0			
Accessed in the	Traditional Healer/ Dai	0	0	0	0	0	0	0			
last 12 Months	Local Doctor/ RMP	58.9	93.2	96.8	45.3	73.4	97.3	98.3			
(%)	Chemist Shop	3.6	18.9	14	18.8	14.1	8	0			
	Mobile Clinic	0	0	0	1.6	42.2	1.3	0			
	SHC/ ASHA/ Aanganwadi	0	4.1	2.2	1.6	0	0	0			
	PHC/CHC	21.4	6.8	1.1	26.6	14.1	2.7	2.7			
	Government Hospital	42.9	64.9	47.3	48.4	57.8	66.7	62.7			
	Private Clinic	51.8	43.2	36.6	57.8	48.4	28	39			
	Private Hospital	73.2	64.9	74.2	79.7	42.2	62.7	69.5			
	Military Hospital	0	1.4	1.1	0	0	0	0			
	CSR Hospital/ company	0	0	0	0	1.6	0	0			

4.5 HEALTH CARE FACILITIES & BIRTH DETAILS

	aided hospital							
	No Treatment	0	0	0	0	1.6	0	0
	Depends on Ailment	0	0	0	0	0	0	0
Birth in Last 3 Years (Frequency)		8	17	20	16	6	21	19
Sow of shild (0/)	Male	62.5	52.9	60	56.2	16.7	52.4	42.1
Sex of child (%)	Female	37.5	47.1	40	43.8	83.3	47.6	57.9
	Government Maternity Centre / General Hospital	62.5	41.2	30	56.2	33.3	61.9	63.2
	Private Maternity Centre / Hospital	37.5	58.8	60	43.8	66.7	28.6	26.3
Place of Birth	PHC / CHC	0	0	0	0	0	9.5	0
(%)	Health Sub Centre	0	0	5	0	0	0	0
	Home By Nurse / Doctor	0	0	5	0	0	0	0
	Home By Birth Attendant	0	0	0	0	0	0	10.5
	Home By Other	0	0	0	0	0	0	0

HEALTH CARE FACILITIES AND BIRTH DETAILS

Data suggests that across the surveyed villages local doctor (RMP) is the primary mode of treatment. Only Masani is the village where less than 50% of the population accesses the services of RMPs while in rest of the villages more than 50% of population avail the services of RMPs. In Masani, 32.8% of the population accesses private clinics as a primary mode of treatment. Looking at the most accessed health care facility in last 12 months majority of population accessed RMPs. More than 90% of the population in Phumanwal, Kila Bariyan, Janedpur and Paharpur accessed RMPs services as they are easily available, cost effective and are present in the village itself. It is also analyzed that more than 60% of the population also have accessed private hospitals in the last 12 months except Rajpura where only 42.2 % of the population accessed private hospitals. Government hospitals which are almost more than 5 Km of distance from all the surveyed villages have been accessed highest from the habitants of Pharpura (66.7%) followed by Phumanwal (64.9%) and the lowest is 42.9% in Bhimri village. During the interaction with the participants it came to the notice that accessibility of PHC is less because of the reasons like absence of health personnel and lack of medicines availability.

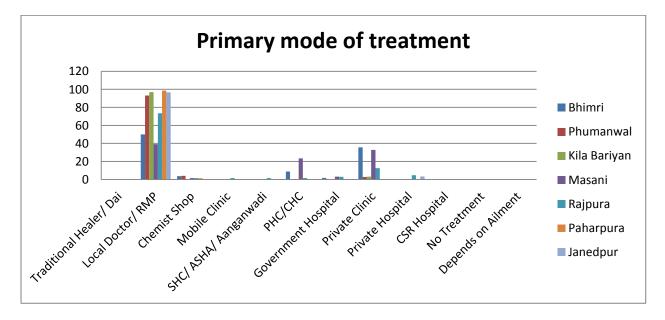


Figure 2: Primary Mode of Treatment

In last three years 21 children are born in Paharpura followed by Kila Bariyan (20) and Bhimri (8). It is clear from the data that only in Rajpura and Janedpur the birth rate of female children is more as compare to male children. It is observed that besides taking the services of RMPs as the

primary mode of treatment, the majority of the population among all villages prefers government and private maternity hospitals when it comes for the deliveries. Only 10.5% of the births in Janedpur have taken place at home in the presence of birth attendants. The presence of ASHA worker is also marked in each surveyed village. Along with it, government's scheme of maternity allowance is also received by those mothers who have delivered in medical institutions.

	Table 6: LIVELIHOOD, LAND HOLDING & LIVESTOCK												
		Village 1 Bhimri	Village 2 Phumanwal	Village 3 Kila Bariyan	Village 4 Masani	Village 5 Rajpura	Village 6 Paharpura	Village 7 Janedpur					
	House wife	28.9	28.4	29	27.2	29.8	25.2	28.1					
	Own Farm Activities	9.9	15.3	16.8	10	14.8	4.2	4.2					
	Agricultural Labour	1.4	4	5.8	6.3	4.6	10.3	12.1					
	Non – Agriculture Labour	15.6	10.3	8.6	15.4	8.3	8.5	10.4					
	Salaried Employment	6.4	4.5	7.2	3.6	4	6.7	3.9					
Duine a urr	Petty Business	1.4	1.2	1.4	0.6	1.3	2.8	3.9					
Primary Engagement	Contractor / Broker	1.4	0	0	0	0	0	0.2					
(%)	Cattle Rearing	0	0	0.2	0	0.4	0	0.9					
	Collect / Sale of Forest / Mining Products	0	0	0	0	0	0	0					
	Rent / Pension / Remittance	1	0	0.4	0	0	0	0					
	Artisan	0	0	0.6	0.6	0	0.3	0.3					
	None	34	36.3	30	36.3	36.8	42	36					
	House wife	0.5	0.7	2.3	4.7	1.4	4.9	5.3					
	Own Farm Activities	0.5	0	0.6	0	0	0	0					
Secondary	Agricultural Labour	0	1.5	0.3	0	0.4	4.9	1.8					
Engagement (%)	Non – Agriculture Labour	0	2.2	0.3	2.4	0	1.3	0					
	Factory Labour	0	0	0	0	0	0	0					
	Salaried Employment	0	0.4	0	0	0.4	0	0					

4.6 LIVELIHOOD, LANDHOLDING & LIVESTOCK

	Petty Business	0	0	0	1.4	0	0.4	0
	Cattle Rearing	0	1.8	2.6	2.4	0.8	0.9	2.2
	Collect / Sale of Forest / Mining Products	0	0	0	0	0	0	0
	Rent / Pension / Remittance	0	0	0	0	0	0	0
	Contractor / Broker	0.5	0	0	0	0	0	0
	None	98.5	93	93.9	89.1	97	87.6	90.7
	Artisan	0	0.4	0	0	0	0	0
	Total Area	587	7000	7500	310	700	300	170
	Irrigated	560	4200	7400	300	660	200	100
Land (in acres)	Non- Irrigated	0	800	0	0	0	0	35
Lanu (macres)	Grazing	0	0	0	2	10	0	0
	Forest	0	0	0	0	0	0	0
	Wasteland	20	30	0	1	0	0	0
	Flood Proneness	0	0	0	0	0	0	0
	Alkalinity	0	0	0	0	0	0	0
Agricultural	Water Logging	25	25	25	50	25	50	50
Land Condition (%)	Soil Erosion	0	0	0	0	0	0	0
(70)	Drought Proneness	0	25	0	0	0	0	0
	Snowfall	0	0	0	0	0	0	0
Ownership of Agricultural Land (%)		39.3	55.4	69.9	39.1	51.6	17.3	39

	0-5 acres	31.9	68.1	72.1	60	60.7	61.6	52.1
	6 -10 acres	27.2	29.3	16.8	28	24.2	15.4	21.7
Total Owned Land (%)	11 – 15 acres	18.1	2.6	9.2	8	12.1	23	13.1
Lanu (70)	16 -20 acres	18.1	0	1.9	4	0	0	0
	21 acres and above	4.7	0	0	0	3	0	13.1
	0-5 acres	31.9	68.1	72.1	60	60.7	61.6	52.1
	6 -10 acres	27.2	29.3	16.8	28	24.2	15.4	21.7
Cultivated Land (%)	11 – 15 acres	18.1	2.6	9.2	8	12.1	23	13.1
(70)	16 -20 acres	18.1	0	1.9	4	0	0	0
	21 and above acres	4.7	0	0	0	3	0	13.1
	0-5 acres	31.9	68.1	72.1	60	60.7	61.6	52.1
T	6 -10 acres	27.2	29.3	16.8	28	24.2	15.4	21.7
Irrigated Land (%)	11 – 15 acres	18.1	2.6	9.2	8	12.1	23	13.1
(70)	16 -20 acres	18.1	0	1.9	4	0	0	0
	21 and above acres	4.7	0	0	0	3	0	13.1
	Canal	18.2	7.5	20.3	4	0	0	0
	Pond	0	0	0	0	0	0	0
	Well	0	0	0	0	0	0	0
a	River	0	0	0	0	0	0	0
Sources of Irrigation (%)	Motor Pump	0	0	6.2	0	3.3	0	0
11 figation (%)	Tube well	95.5	100	90.6	96	96.7	100	82.6
	Bore Well	4.5	0	1.6	0	0	0	17.4
	Dam	0	0	0	0	0	0	0
	None	0	0	0	0	0	0	0

	Wheat	500	4150	7300	280	650	190	90
Major Crops	Paddy	500	4150	7300	260	650	200	100
(Average Land	Mustard	0	0	50	0	0	10	10
Area)	Cotton	0	0	20	0	0	0	0
	Vegetables	0	0	0	40	10	0	0
Ownership of Livestock (%)		53.6	78.4	76.3	76.6	70.3	48	83.1
	He Buffalo	10	12.1	16.9	16.3	8.9	11.1	12.2
	She Buffalo	73.3	91.4	90.1	71.4	93.3	72.2	93.9
	Cow	50	41.4	15.5	51	31.1	44.4	46.9
List of	Bullock	0	31	32.4	26.5	15.6	5.6	10.2
Livestock (%)	Sheep	0	0	2.8	0	0	0	0
	Goat	0	0	1.4	8.2	2.2	2.8	2
	Piggery	0	0	0	0	0	0	0
	Poultry	0	0	1.4	2	0	0	2

LIVELIHOOD, LANDHOLDING AND LIVESTOCK

The data in the table is showing that there are various sources of livelihood are available in the sampled villages. In a closer look it is found that around 15% of the population from Bhimri and Masani is engaged in non-agricultural labour as their primary source of livelihood while in rest of the villages nearly 10% of the population is engaged in non-agricultural labour works. The other sources such as farming, agricultural labour, salaried employment, petty business and artisan are also available in the villages but a small portion of the population across the seven villages found to be engaged in these sources. In Kila Bariyan 16.8% of the population is engaged in farming activities followed by Phumanwal (15.3%) and least population is 4.2% in Paharpur and Janedpur. Cattle rearing have also come out as a secondary engagement and source of livelihood for a small portion of population in the sampled villages.

As per the key stake holders of the villages, data shows that Kila Bariyan and Phumanwal have the highest agricultural land available among other surveyed villages. Both villages have more than 7000 acres of land while least availability of land is reported in Janedpur (170 acres). In agricultural land the problem of water logging is also reported in almost every village but during discussions with the participants it was brought into notice that it does not affect the crops.

The majority of the population in all the villages owns the agricultural land between 0.1 to 5 acres and highest in Kila Bariyan with 72.1% and lowest in Bhimri with 31.9% only. Land holdings between 6 to 10 acres also observed in every village with highest in Phumanwal (29.3%) and lowest in Paharpura (15.4%). In Janedpur and Bhimri, 13.1% and 4.7% sampled population respectively also has land holdings of more than 21 acres. The same percentage of agricultural land is cultivated and irrigated by the owners of the respective villages. Tube wells are the main source of irrigation reported in every sampled village by the participants. Wheat and Paddy are the two Khareef and Rabbi crops grown in all the villages.

The ownership of the livestock is highest in Janedpur. Nearly 80% of the households own she buffaloes and cows followed by Phumanwal (78.4%), Masani (76.6%) and lowest owners are in Paharpura (48%). More than 70% of the population across all the villages own she buffaloes while a smallest population across all villages also own bullocks.

4.7 SOCIAL WELFARE SCHEMES

		Table 7:	SOCIAL WEL	FARE SCHE	EMES			
		Village 1 Bhimri	Village 2 Phumanwal	Village 3 Kila Bariyan	Village 4 Masani	Village 5 Rajpura	Village 6 Paharpura	Village 7 Janedpur
	Total Beneficiaries	0	0	0	0	0	0	0
	Male	0	0	0	0	0	0	0
Indira Awas	Female	0	0	0	0	0	0	0
Yojana	Financial Assistance	0	0	0	0	0	0	0
	Challenges	0	0	0	0	0	0	0
	No. Of Job Cards	0	0	0	0	0	0	0
	Males	0	0	0	0	0	0	0
MONDECA	Females	0	0	0	0	0	0	0
MGNREGA	Total	0	0	0	0	0	0	0
	Min. Wage	0	0	0	0	0	0	0
	Challenges	0	0	0	0	0	0	0

The absence of the social welfare schemes are marked in all the sampled villages. Panchayat representatives during discussions reported that MGNREGA is not functioning because of the low wages and villagers hardly agree to work as MGNREGA employee.

4.8 SAFETY NETS & CREDIT PATTERNS

	Tab	le 8: SAFET	FY NETS & CH	REDIT PAT	TERNS			
		Village 1 Bhimri	Village 2 Phumanwal	Village 3 Kila Bariyan	Village 4 Masani	Village 5 Rajpura	Village 6 Paharpura	Village 7 Janedpur
	APL Card	51.8	62.2	67.7	51.6	56.2	57.3	64.4
	BPL Card	44.6	37.8	31.2	48.4	42.2	28	30.5
Type of PDS /	Antyodaya / BBPL Card	0	0	0	0	0	0	0
Ration Card (%)	Applied But Not Received	0	0	0	0	1.6	9.4	3.4
	Not Applied	3.6	0	1.1	0	0	5.3	1.7
	Yes, Regularly	35.2	33.8	30.4	45.3	41.3	29.7	19.6
Avail PDS (%)	Yes, Sometimes	7.4	4	69.6	3.1	3.1	1.6	9
	No	57.4	62.2		51.6	55.6	68.7	71.4
	Not Interested	0	0	0	0	0	0	2.3
	Poor Quality of Grains	2.8	2		2.9	2.7	4.4	8.9
	No PDS shop / Irregular	14.3	4.1	1.6	2.8	2.7	0	2.2
Reasons for Not	Shop Too Far	0	0	0	0	0	0	2.2
Availing PDS (%)	Have APL Card	82.9	93.9	98.4	94.3	94.6	95.6	84.4
	No Money During PDS Supply	0	0	0	0	0	0	0
	Use Own Farm Produce Partly	0	0	0	0	0	0	0

People with outstanding loans (%)		28.6	55.4	39.8	57.8	40.6	34.7	39
	Bank	44.4	60	63.2	55.8	30	34.6	44.4
	Money Lender	16.7	8	7.9	16.3	0	7.7	22.2
	Trader / Employer	0	4	5.3	11.6	0	23.1	7.4
Source of Credit (%)	NGO	0	0	0	0	0	0	0
(70)	Relative / Friends	5.6	12	18.3	9.3	30	34.6	11.2
	SHG	0	0	0	0	0	0	0
	Co-operative Society	33.3	16	5.3	7	40		14.8
	0 -1%	11.1	4	10.6	2.3	13.3	3.8	14.8
	2- 5%	11.1	28	23.6	41.9	33.4	69.2	33.4
Interest Rate (%)	6-10%	22.3	32	34.2	28	10	11.5	25.9
	11-15%	44.5	6	13.2	11.6	16.6		7.4
	15 -20%	11	30	18.4	16.2	26.7	15.5	18.5
	Own Land / House Deed	55.6	64	63.2	41.9	53.3	19.2	37
	Others Land / House Deed	0	2	0	0	3.3	0	0
Assets Mortgaged	Own Jewels	0	2	2.6	0	0	15.4	22.3
(%)	Others Jewels	0	2		0	0	0	0
	Own Durable Goods	0	0	0	0	0	0	0
	Others Durable Goods	0	0	0	0	0	0	0
	Personal Security	16.7	8	15.8	11.6	6.7	23.1	3.7
	None	27.7	22	18.4	46.5	36.7	42.3	37
Purpose of Loan	Farming	33.3	17.6	33.3	22.7	27.3	11.5	18.5

(%)	Petty Trade	16.7	5.9		2.3		7.7	7.4
	Medical Expenses		9.8	12.8	20.5	12.1	11.5	7.4
	Education					9.1	3.8	37
	Marriage	27.8	25.5	15.4	15.9	18.2	34.6	0
	Family Function / Ceremonies / Festivals	0	0	2.6	0	0	0	0
	House Construction / Purchase / Repair	16.7	19.6	12.8	29.5	15.2	7.7	11.1
	Purchase of Land		5.9	7.7	2.3	0	0	0
	Purchase of Jewellery	0	0	0	0	0	0	0
	Purchase of Durable Goods	0	0	0	0	3	0	0
	Buy Animals	5.5	2	0	2.3	3		7.4
	Pay Another Loan	0	3.9	0	0	0	3.8	3.7
	Family Consumption	0	9.8	10.3		9.1	11.5	0
	Pregnancy / Child Birth Related Expenses	0	0	0	2.3	0	0	3.7
	Death Related Expenses	0	0	0	0	0	0	0
	No Response	0	0	5.1	2.2	3	7.9	3.8

SAFETY NETS AND CREDIT PATTERNS

More than 50% of the population across all the seven villages has APL cards. The highest APL families are in Kila Bariyan (67.7%) followed by Janedpur (64.4%) and the lowest in Bhimri (51.8%). The highest numbers of BPL card holder families are in Masani (48.4%) and lowest in Paharpura (28%). In Paharpura nearly 9% of the population is yet to receive the ration cards. The BPL families across all the seven villages regularly avail the PDS while it is common in Punjab and Haryana as coming out from the data also that families who have APL cards receives no or less benefits from the PDS. It is also analysed from the available data that average 11% of the population holding BPL cards across all the seven villages sometimes avail PDS. The reasons for not availing PDS by BPL families are mainly irregularity and poor quality of grains.

It is clear from the data that loans are taken in all the surveyed villages. Masani and Phumanwal are the two villages where nearly 55% of the borrowers have taken loan mainly from banks by mortgaging their land. The people with outstanding loans are less in Masani (28.6%) where the main source of loan is bank and cooperative society. In all the sampled villages few portion of the population have also taken loan from the relatives and friends and have not mortgaged any asset and paying interest rate in between 2 to 5%. In the close observation, 37% of the borrowers have taken loan for the purpose of higher education in Janedpur. A small percentage of the borrowers taking loan for education are also found in Paharpura and Rajpura.

		Tabl	e 9: INFRAS'	TRUCTURE F A	CILITIES &	ACCESSIBI	LITY		
			Village 1 Bhimri	Village 2 Phumanwal	Village 3 Kila Bariyan	Village 4 Masani	Village 5 Rajpura	Village 6 Paharpura	Village 7 Janedpur
	Playground Samaj						\checkmark		
	Mandir		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Gymnasium	-	\checkmark	\checkmark		\checkmark			
Recreational	Community hall		\checkmark	\checkmark		\checkmark	\checkmark		
	Library	-				\checkmark			
	Cremation/ Burial Place		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
		Within Village			\checkmark	\checkmark	\checkmark	\checkmark	
	Cement/Tar road	Within 5 Km							
		More than 5 Km							
		Within Village			\checkmark		\checkmark		
Physical	Bus Stop	Within 5							
Facilities	Bus Stop	Km							
		More than 5 Km				√(Bhawani garh)			
		Within Village							
	Public Telephone	Within 5 Km							
	Booth	More than 5 Km					√(Bhawani garh)		

4.9 INFRASTRUCTURE- AVAILABLITY AND ACCESSIBILITY

	Daily Market	Within Village Within 5 Km More than 5 Km	√(Nabha)	a/(Alakha)	√(Longowal)	√(Bhawani	√(Bhawani	√(Siban)	√(Siban)
	Weekly	Within Village Within 5 Km		√(Nabha)	√(Longowal	garh)	garh)	kan y	kan y
	Market	More than 5 Km	√(Nabha)	√(Nabha))	√(Bhawani garh)	√(Bhawani garh)	√(Siban)	√(Siban)
	PDS Shop	Within Village Within 5 Km	\checkmark	\checkmark	\checkmark			√	N
		More than 5 Km Within							
	Grocery Shop	Village Within 5 Km	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
		More than 5 Km Within							
	DTP/Xerox Centre	Village Within 5 Km		√(Nadampur)	\checkmark	√(Nadamp ur)	√(Nadamp ur)	√(Siban)	√(Siban)
	Centre	More than 5 Km	√(Mazi)	v(ivadampur)		ur)	ur)	v(Sloan)	v(Stoan)
Local Institutions/	Post Office	Within Village							

	Within 5 Km		√(Mazi)	$\sqrt{(\text{Longowal})}$	√(Nadamp ur)	√(Nadamp ur)	√(Sair)	√(Sair)
	More than 5 Km	√(Mazi)					((Sull)	
	Within Village							
Railway Station	Within 5 Km							
	More than 5 Km	√(Nabha)	√(Nabha)	√(Sangrur)	√(Nabha)	$\sqrt{(\text{Sangrur})}$	$\sqrt{(Kaithal)}$	$\sqrt{(Kaithal)}$
	Within Village	· · · · · /						
Police Station	Within 5 Km			$\sqrt{(Longowal)}$				
	More than 5 Km	√(Bhawani garh)	$\sqrt{(Bhawanigar)}$		$\sqrt{(Bhawani)}$ garh)	$\sqrt{(Bhawani)}$ garh)	√(Siban)	√(Siban)
Gram	Within Village			\checkmark				
Panchayat Office	Within 5 Km							
onnee	More than 5 Km							
	Within Village							
Co-operative Society	Within 5 Km		√(Kalajha)	√(Ubawad)	√(Nadamp ur)	√(Nadamp ur)		
	More than 5 Km	√(Mazi)					√(Ramthari)	√(Ramthari
	Within Village	, , , , , , , , , , , , , , , , , , ,						
Bank for S/B Account	Within 5 Km		√(Kalajha)	√(Ubawad)	$\sqrt{(Nadamp ur)}$			
	More than 5 Km	√(Mazi)				√(Bhawani garh)	√(Ramthari)	√(Ramthari

	Block Development Office	Within Village Within 5 Km More than 5 Km	√(Bhawani garh)	√(Bhawanigar h)	√(Sangrur)	√(Bhawani garh)	√(Bhawani garh)	√(Siban)	√(Siban)
	Taluk Headquarters	Within Village Vithin 5 Within 5 Km Vore than 5 Km 5 Km	√(Bhawani garh)	√(Bhawanigar h)	√(Sangrur)	√(Bhawani garh)	√(Bhawani garh)	√(Siban)	√(Siban)
	District Headquarters	Within Village Within 5 Km More than 5 Km	√(Sangrur)	√(Sangrur)	√(Sangrur)	√(Sangrur)	√(Sangrur)	√(Kaithal)	√(Kaithal)
	Warehouse	Within Village Within 5 Km More than 5 Km		√(Bhawanigar		√(Bhawani	√(Bhawani		
	APMC/ Mandi	Within Village Within 5 Km	√(Sangrur)	h) √(Mazi)	$\sqrt{(\text{Sangrur})}$	garh) √(Nadamp ur)	garh) √(Nadamp ur)	√(Kaithal)	√(Kaithal)
Tuonanant	Public/ Pvt./	More than 5 Km	√(Nabha)					√(Kaithal)	√(Kaithal)
Transport facilities	Mini buses Maxi Cabs/		$\frac{}{}$						

	Jeep								
	Share auto			\checkmark			\checkmark	\checkmark	\checkmark
	Taxi/ Auto		\checkmark	\checkmark			\checkmark		
	Bicycle		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Motorcycle		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Tractors			\checkmark	\checkmark	\checkmark	\checkmark		
		Within Village	\checkmark						
	Pre-	Within 5			,	, , , , , , , , , , , , , , , , , , ,	•	•	,
	Pri/Nursery School	Km							
	School	More than 5 Km							
		Within Village	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark
	Govt. Primary	Within 5 Km							
	School	More than 5 Km							
Education		Within Village							
	Charitable Primary	Within 5 Km							
		More than 5 Km							
		Within Village			\checkmark		\checkmark		
	Pvt. Primary School	Within 5 Km		√(Rajpura)		√(Rajpura)			
		More than 5 Km	√(Nabha)					√(Siban)	√(Siban)
	Govt. Secondary	Within Village			\checkmark				

School	Within 5 Km		√(Nadampur)		√(Nadamp ura)	√(Nadamp ur)		
	More than 5 Km	√(Ramgarh)	((ruuunipui)				√(Khedikala)	√(Khedikala
Charitable	Within Village							
Secondary School	Within 5 Km							
School	More than 5 Km							
D (Within Village					\checkmark		
Pvt. Secondary School	Within 5 Km			√(Ubawad)	$\sqrt{(Nadampura)}$			
School	More than 5 Km	√(Nabha)	$\sqrt{(Shahpur)}$				√(Siban)	$\sqrt{(Siban)}$
	Within Village							
Higher Secondary	Within 5 Km			√(Ubawad)		$\sqrt{(Nadamp ur)}$		
School	More than 5 Km	√(Nabha)	$\sqrt{(Bhawanigar)}$		$\sqrt{(Bhawani)}$ garh)		√(Siban)	√(Siban)
	Within Village							
Degree College	Within 5 Km							
0	More than 5 Km	√(Nabha)	√(Patiala)	$\sqrt{(\text{Sangrur})}$	√(Patiala)	$\sqrt{(\text{Sangrur})}$	$\sqrt{(Kaithal)}$	√(Kaithal)
ITI/	Within Village						()	·()
Polytechnic	Within 5 Km							

		More than 5 Km	√(Nabha)	√(Nabha)	√(Sunam)	√(Sangrur)	√(Sangrur)	√(Kaithal)	√(Kaithal)
		Within Village							
	Vocational training	Within 5 Km							
		More than 5 Km	√(Nabha)	√(Nabha)	√(Sangrur)	√(Bhawani garh)	$\sqrt{(\text{Sangrur})}$	$\sqrt{(Kaithal)}$	$\sqrt{(Kaithal)}$
	Local Doctor/ RMP	Within Village					\checkmark	\checkmark	
		Within 5 Km	√ (Bhimra)			$\sqrt{(\text{Rajpura})}$			
		More than 5 Km	(Dilling)						
	Chemist Shop	Within Village		λ (Nadampura λ λ (Raipura) λ (Nadamp					
		Within 5 Km		√(Nadampura)	$\sqrt[n]{(Longowal)}$	√(Rajpura)	$\sqrt{(Nadamp ur)}$		
Haaldh Carra		More than 5 Km	√(Mazi)				√(Siban)		
Health Care Institutions	Mobile Clinic	Within Village			√ √				
		Within 5 Km							
		More than 5 Km							
	SHC/ ASHA/ Aanganwadi	Within Village			\checkmark	\checkmark	√	√	ν
		Within 5 Km							
		More than 5 Km							
	PHC/CHC	Within							

	Village							
	Within 5 Km		√ (Nadampura)	$\sqrt[]{}$ (Longowal)	$\sqrt[n]{(Nadampur a)}$	√ (Nadampur)	√ (kanthli)	$\sqrt{(\text{kanthli})}$
	More than 5 Km	√(Bhawani garh)						
Government Hospital	Within Village							
	Within 5 Km							
	More than 5 Km	$\sqrt{(\text{Sangrur})}$	√ (Bhawanigarh)	$\sqrt{(\text{Sangrur})}$	(Bhawanig arh)	√ (Bhawanig arh)	$\sqrt{(Gula)}$	$\sqrt{(\text{Kaithal})}$
Private Clinic	Within Village							
	Within 5 Km			$\sqrt[]{(Longowal)}$				
	More than 5 Km	√ (Naba)	√ (Nabha)		√ (Bhawanig arh(√ (Bhawanig arh)	$\sqrt{(Kanthli})$	√ (Kanthli)
Private Hospital	Within Village							
	Within 5 Km			(Longowal)				
	More than 5 Km	√ (Naba)	$\sqrt{(Nabha)}$		√ (bhawaniga rh)	√ (Bhawanig arh)	$\sqrt{(Siban)}$	$\sqrt{\text{(Siban)}}$
CSR Hospital/	Within Village					√		
company aided	Within Village							
hospital	Within Village							

CHAPTER 5: AN OVERVIEW OF PROBLEMS AND POSSIBLE AREAS OF INTERVENTIONS

5.1 SALIENT FEATURES OF PROBLEMS AND RECOMMENDATIONS

The problems in the report have been explained in detail with the village-wise findings analysed and the interventions succeeding these are aimed at a sustainable approach to improve the situation of the villages in a long-term and effective manner. Being in similar stage of development and poverty, villages may have similar problems in nature like lack of healthcare, livelihood, sanitation facilities. Therefore, the recommendations or possible areas of interventions are also similar in nature and explained once in this section under each area of concern. However, the pertinent point to be noted is that this does not imply cluster or common project-implementation for a set of villages. The interventions recommended in need independent implementation in each village under the given location, as the problem is uniquely present in each village as given in the village-wise findings.

There are also few problems and recommendations that are singled-out in the last part of this chapter which are identified and appearing exclusively in that particular village, but not in any other villages in that same location. Hence these have been given a separate mention. The implementation, like in the first part, also needs to be independently done in that particular village.

5.2 Prioritising and Nature of Interventions

As required in the Memorandum of Collaboration (MoC) between TISS and IOCL, each intervention has been given a Priority on the basis of stakeholders' views, data analysis and on-field observations of the Research team. This means that in each village the recommended intervention on Priority-1 needs to be given first preference and importance over others and accordingly implementation should be planned for each village.

Moreover, each intervention also has been segregated under three terms depending upon their 'nature' as required in the MoC: Short Term, Medium Term and Long Term Intervention. Short term intervention is defined here as those interventions that require less than 1 year engagement from the company; Medium term interventions are those that need 1 to 3 years of engagement; Long term interventions are those that need a continued engagement of more than 3 years. A particular intervention may be short, medium or

long term, but the implementation needs to begin in the first year; the number of years is indicative, and not restricted, of the duration of completion to give an idea for planning. Also, if the company and implementing agency deems any intervention to be continued longer than the specified term to achieve its objectives or expanded depending on the need and beneficiary response, the discretion is upon the company to allocate the time, efforts and spending on the intervention accordingly. The implementation may be planned for those selected interventions by the company on the basis of the priorities and nature of interventions provided in this chapter.

5.3 Priority 1: Health care Facilities – Medium term intervention

As per the data collected from the seven surveyed villages it is analysed that majority of the people in all the villages are accessing local doctors/quacks for treatment purposes for ailments. It was also observed that people access private clinics as well as government hospitals in all the villages but the percentage of accessing local doctors is much higher than people accessing these private or public formal facilities. These doctors do not have any professional qualification like MBBS, BAMS, etc. They treat people on the basis of their experience of locally available medicines and without proper knowledge, formal training or any registration with the medical council. Therefore, treatment from these doctors is always a risk and dangerous for human life as local doctors do not conduct proper medical tests for diagnosing the diseases and give medicine by looking at some symptoms which is not a safe and careful practice and leads to reactions in human body many times which can lead to risk to life also sometimes.

In all the surveyed villages there are considerably several people from underprivileged caste groups who are not economically sound and could not afford the high cost of treatment from private hospitals or clinics. As a result they have to borrow money from different sources at high rate of interest to meet the high expenses of treatment from private hospitals or clinics. PHCs do not have proper health facilities; further doctors remain unavailable most of the time. The health sub centres present in few of the villages most of the time remains closed. If opened then only ANMs are present there. Doctors hardly visit these sub health centres. The closest government health facility accessed by people is at a distance of 7-15 km from all the villages.

5.3.1 Village specific findings: Village 1: Bhimri

The village lacks facilities in terms of healthcare. There is no health centre and medical store in the village due to which 50% of the villagers access the services of the local doctors/ RMPs which are easily available in the village. It was observed that these non-certified doctors were giving out unpacked medicines to the patients. The medicines are not even stored in proper place. Storage of medicines in proper place, packaging with the expiry date, availing them with prescription from a healthcare professional are prerequisites to ensure the quality of treatment. Only 8.9% of the sampled population accessed the service of the PHC for their primary treatment which is at a distance of 10 km from the village. The nearest health sub-centre (SHC) is 3 km from the village and none of the households interviewed reported have accessed its services because of the absence of healthcare personnel and medicines at the SHC as per the respondents. It is also observed that mainly women and children face more problems as their minor illnesses go mostly ignored which leads to serious affect on the health.

Therefore, there is a need to ensure better healthcare facilities in this village so that health status of the village improves.

Village 2: Phumanwal

The village has a population of nearly 1788 persons and no public health institution is available in the village. The dependency is only on the local doctors/ RMPs. As per the data, more than 93% of the sampled population seeks primary treatment from RMPs and have accessed their services over the last one year and they provide medicines without any tests or proper check-ups. The RMPs are available in the village on a much more regular basis, while in government health institutions health personnel are available at specific timings; also there are no government health systems in the village to counter the access of RMPs which makes the situation vulnerable. This accentuates the need for better health services in the village.

Village 3: Kila Bariyan

The health sub centre is present within the village, but the presence of a government health institution is not able to change the health seeking behaviour of the villagers, as data shows that 96.8% of the sampled population seeks the services of unqualified doctors generally known as RMPs for their primary treatment. As per the respondents, the health sub centre in the village lacks in providing adequate health services even for primary treatment of minor ailments. The doctors rarely visit the sub centre and the common medicines of cough and cold are also out of the stock most of the times. This leaves the villagers with the only available option of accessing the services of RMPs which is not a safe practice.

Village 4: Masani

As per the data, Masani is the only village out of seven surveyed villages where only 39.1% of the villagers access the services of RMPs. Neither government nor private health institutions present in the village. It is observed that the people from difficult financial backgrounds mostly prefer RMPs for their primary as well as for major treatments. The services of MBBS doctors are accessed by people who can afford it and come from better financial backgrounds in the village. The services of qualified doctors should be accessed and available for each and every member of the society and if financial constraints and long distances restrict them to avail their services, then it becomes important to provide better health services within the village.

Village 5: Rajpura

Even with the presence of SHC within the village and a PHC two km from the village, there is dependency on the RMPs for primary treatment. The reasons from the villagers are same as came from other villages such as lack of adequate health services and health commodities in the government health institutions. The data shows that 73.4% of the villagers prefer to avail the services of RMPs for primary treatment and a similar percentage has accessed the services of RMPs over the last 12 months. It is also observed that villagers like to avail the services available in the village, therefore if the services of qualified doctors can be made available then the dependency on the RMPs for the primary treatment can reduced.

Village 6: Paharpura

The condition is more vulnerable in this village as data shows 98.7% of the villagers only accessed the services of RMPs and the remaining 1.3% accessed the services of chemists for their primary treatment. Government or private institutions of healthcare are not accessed by the people; the health sub centre in the village remains closed most of the time as per the respondents. Moreover, the nearest medical store is also at the distance of 8 km from the village. The PHC is at a distance of 5 km but not accessed by the villagers due to the lack of transport facilities and unavailability of medicines as per the respondents. The village has a population of almost 2500 therefore primary health services are the prime need of the village, so that dependency on the local unqualified doctors is reduced.

Village 7: Janedpur

The village shares the same border with Paharpura and the problems in this village are also same. Here also 96.6% of the sampled population accessed the services of RMPs. The inadequacies of the existing public healthcare facilities in and around the village, compels people to visit the RMPs for treatment of the most basic ailments. This practice not only means incurring more spending on healthcare but also the quality is unreliable as the RMPs are not qualified and do not conduct any tests or provide proper medicines.

INTERVENTION

For addressing the problem of unavailability of health care facilities a Mobile Medical Van (MMV) can be started in all the surveyed villages. All the villages are connected with the roads therefore MMVs can easily reach all the villages. MMV should be equipped with primary health facilities. It should have one

MBBS doctor (preferably female), one compounder, one driver and one community mobilizer. Need of community mobilizer arises as there should be one person which can make the people of the village aware of the service and can ensure maximum beneficiaries. Community mobilizer can be employed from the villages only as it will also create employment opportunity and will have a positive impact on the service. The MMV should visit each and every surveyed at least twice a week so that proper follow up of patients can be done. MMV should stop at a common place of the village which is easily accessible by all the villagers. The service can be connected with nearby government or private hospitals so that in the time of emergencies patients can be referred.

The service can be started by making health cards of each and every family. The unique health cards can also be used with a multi-purpose of sponsoring the economically and social under privileged communities to avail treatment, tests and hospitalization for major illnesses at selected hospitals at nominal or nil costs. A nominal fee should be charged for the registration for first time. The diagnosis and check-up should be free of cost but medicine should be provided at a nominal cost. The nominal charges will ensure the proper implementation of the project and villagers will also feel the importance of the healthcare service and value its quality. By charging nominal fees unnecessary and excess use of the services can also be avoided. Making cards for everyone will help in keeping records of patients and kind of diseases available in village resulting in long-term solutions of the same.

5.4 Priority 2: Livelihood – Long term intervention

Lack of livelihood opportunities is a largely impacting issue noticed in all of the surveyed villages. Lack of higher education, no job opportunities in the village and malfunctioning of government schemes such as MGNREGA etc. are the reasons of lack of livelihood opportunities in these villages. Livelihood issues pose social as well as economic concerns for all the villages. First focusing on economic concern, livelihood options and proper income is the first requirement for a person to fulfil his basic needs like food, clothing and shelter. Lack of proper income generation activities can also lead to secondary ill effects such as lack of proper nutrition and drinking water, no access to better healthcare facilities, lack of education of children, lack of adequate sanitation measures and low living standards.

During the survey it has been observed that most of the male youth are engaged in agricultural activities, while small percentage of female youth also found working in the nearby textile and other industries. Majority of female youth stay in the homes and are not engaged in any income generation activities. The situation of unemployment among youth is further in a deplorable state in the two villages namely Janedpur and Paharpur. These two villages come under Kaithal district of Haryana. People are deprived

from the privileges of employment due to the distance constraint, high illiteracy and unskilled work pattern. People do not have any kind of skill through which they can generate employment. There is need to provide skill based training to the people. SHGs are not found functional in these villages. To commute from these two villages to the cities is also not easy due to the limited transportation facilities which also add to the reasons of unemployment.

5.4.1 Village Specific findings:

Village 1: Bhimri

The data of the village shows that 15.6% of the sampled population is engaged in non-agricultural labour work for their livelihoods and 34% of the people are not engaged in any kind of work. The women and other young girls found to be not engaged in any income-generation activity. Nearly 10% of the population depends on farming for their livelihood but the youth of the village is less interested in this, as observed in the village. There is a need to provide the youth and the population not engaged in any work, skill development so that they can have more options of livelihoods.

Village 2: Phumanwal

The village has 28.4% housewives and 36.3% of the population is dependent on other family members. This signifies that there is an urgent need to bring some livelihood options to the villagers, especially to the women as they are restricted to go out and look for a job. Only three persons have received vocational training out of which only one is engaged in income generation activity. This also shows that villagers are less aware about the jobs in the nearby towns. Also, 15.3% of the people are engaged in farming and only 4% of the people engaged in agricultural labour work. Income levels of the people can be alleviated if skill training is imparted in farming sector.

Village 3: Kila Bariyan

To increase the employability for the people of the village there is a need to make them skilled and educated. The village's literacy level is 59.2% but few people have pursued higher education. There are countable people in the village who have done vocational training. As people are not highly educated and unskilled, they are not able to get jobs. Therefore it becomes important to make the people skilled and provide them with livelihood.

Village 4: Masani

In this village, 36.3% of the people are not engaged in any income generation activity as they are not able to find a job and not aware about jobs. Even if they find a job then their educational qualifications and skills do not match the requirement. Moreover, the social barriers restrict women to educate themselves, build their skills and look for a job therefore it becomes important to create some livelihood option for them in the village itself.

Village 5: Rajpura

In Rajpura, 36.8% of the sampled population are not involved in any income generation activity and are dependent on others' income. Apart from this 8.3% of the population is engaged in non-agricultural labour work which is not a regular source of income as it is demand-based activity. There are 29.8% of the housewives in the village, apart from household chores they are not engaged in any livelihood related work. Livelihood options need to be created for them as the MGNREGA scheme is also not functioning in the village. Therefore it becomes important to create livelihood options for the women in the village and also for the men so that the economic status of the village is improved.

Village 6: Paharpura

This is the only village out of the seven surveyed villages to have 42% of the population completely dependent on other family members. The data also shows that 10.3% of the people are engaged in agriculture labour, this causes migration of people from one place to another in search of work as there is less demand of agriculture labour in the village. Lack of livelihood opportunities and lack of skills not only affects the economic levels but also the overall standard of living of the people. Low income of the households restricts them in availing services of hospitals for better treatment and also restricts them to send their children for higher studies. It can also be seen from the data that 20% of the students have to drop out of their studies to work and support their families. To improve the present situation of the village, livelihood options need to be explored in the village and nearby areas.

Village 7: Janedpur

The village has similar problems as seen in Paharpura. These two villages come under Haryana state and situated near the borders of Punjab. The cities are away and lack of resources of livelihood in the village makes the situation vulnerable. There is an urgent need to provide people of both villages with livelihood options so that the future of the village remains stable and sustainable.

INTERVENTION

Punjab is one of the states in India known for agriculture. It produces a potential amount of food grains for whole India. A potential number of youth found to be engaged in agricultural activities. Therefore there is a need to upgrade their skills with the modern farming techniques. The promotion of horticulture in consultation with horticulture department can also be done by the company which also increases the income of the farmers in the village.

Vocational training to the youth in the courses like mobile repairing, motor mechanic, etc., as per the need of the industries present in the city, can also be imparted to the interested candidates. In Sangrur, big industries such as Pepsico, Arihant Spinning mills, Nahar Fibres, Sabina Woolen mills³, etc. are located where the demand of skilled labour is constant. The major issues raised by Industrial Associations of Sangrur also include insufficient supply of the skilled labour. Therefore in consultation with such associations in the city, the demanded skills can be imparted to the youth and after completion of the training, job placement can be easily provided to them.

Few vocational training programmes like plumber, motor mechanic, electrician, carpenter, etc. can be provided to the youth who are interested in running their small scale business. Apart from this training on two-wheeler repairs, radio / TV repairs, motor rewinding, electrical transformer repairs, irrigation pump-set repairs, tractor and power tiller repairs, cell phone repairs, photography and videography, screen printing, photo lamination, domestic electrical appliances repair, computer hardware and DTP can also be provided, so that people can get employment in nearby areas as well as with in the village.

It is also observed that cattle-rearing is the main secondary engagement for livelihoods in Janedpur and Paharpur, therefore dairy farm activities can be promoted in these two villages. In doing this, with the help of implementing agency, SHGs can be formed in the villages and women groups can also be included in this activity of income generation. Vocational skills required to produce dairy products can be imparted to the SHGs, the initial support of machinery and material can be provided by the company to the SHGs. This can be done in all the surveyed villages, as a potential number of housewives also found in all the villages, which can be engaged in it. The promotion of cattle rearing in few villages is also required. Last but not least, these SHGs also required to be linked up with market so that they can directly sell their dairy products at there. The monitoring and accountability of these SHGs are also required when once formed so that the functioning of these SHGs would not be stopped as observed in most of the cases

³ http://dcmsme.gov.in/dips/Sangrur.pdf

SHGs become non functional either because of accountability or because of lack of market linking. The company can do it in partnership with an implementing partner with expertise in this field.

Apart from this, due to the security and other cultural and societal restrictions on the female youth, training classes of tailoring, embroidery, soft toy making, beautician, household articles, stationery, gift articles courses (suggestive options, not exhaustive) can be started in the village itself, in the Aanganwadis and other community places which can be suggested by the community people also. There should be 2 or 3 enrolees only from each village in each suggested course. The reason for enrolling 2 or 3 females in each of the course is that with this they can find the market in the village itself. Further, after completion of the courses, the material and machinery which is required to start the self-employment ventures can be supported by the company.

5.5 VILLAGE SPECIFIC PROBLEMS AND RECOMMENDATIONS

Villages	Priority	Problems	Interventions	Nature of Interventio
				ns
Paharpur	3	Education facility: Both	IOCL can intervene in providing the basic	Medium
,		the villages share same	amenities such as uniforms, books,	term
Janedpur		border, thus both the	notebooks, school bags, etc to the students	intervention
		villages have a common	which can substantiate the quality of	
		government school.	education and provide the quality education	
	Educational institutions are to the students.		to the students.	
		available up to 8th standard		
		with in the village. Students	Awareness: There is need to create	
		have to go far away from	awareness among the people towards	
		the village to access higher	education and its importance because most	
		education. Students have to	of the people do not allow their children to	
		face the problem of	go school to obtain education more over	
		transportation. Girls are	they send their children to factories to work	
		restricted within the houses	and earn money. Educational camps can be	
		and get involved in	conducted to sensitize the people towards	
		domestic courses due to	education and behavior modification can be	
		gender biased practices,	taken place. This could be done with the	
		security issues and	collaboration of local NGO.	
		awareness regarding the		
		education which hampers	Infrastructure: Government primary and	
		the literacy rate and	middle schools are found to be deprived	
		consequently leads to the	from the basic infrastructural facilities like	
		declined female literacy	safe drinking water, furniture, class rooms	
		rate. It also leads an impact	and separate toilets for the girls. Basic	
		to get employment. Quality	infrastructure helps in maintaining decorum	
		education is a major issue	and discipline in the schools and creating	
		in the rural areas due to the lack of resources,	healthy environment in the school.	

		diaman antion stars the set of	Down official Classon, Down distant	
			Remedial Classes: Remedial classes can	
			play a pivotal role in providing quality	
			education to the students. It can be provided	
			within the government school premises	
			after getting over school education with the	
			collaboration of the local NGO, local	
			Governing body and school authorities.	
		their children but due to		
		financial constraints they do	Academic support: Academic support can	
		not do so.	be provided to the students to promote their	
			enrollment in the school and provide them	
			study material and uniform etc. This can be	
			a step towards providing them financial	
			assistance due to which their parents ignore	
			their children to send to school.	
Ī	4	Veterinary Facility: Most	For the welfare of the animals/cattle,	Short term
		of the villagers have cattle	company can organise health check-up	intervention
		at their homes but there is	camps for animals, twice or thrice in a	
		no veterinary clinic in the	month to assure better health of the cattle/	
		villages to take care of the	animals in the village. The medicines can	
		animals when they fall sick.	be provided free of cost. Before conducting	
		A government veterinary	such camps, initial mobilisation should be	
		clinic is available in Sair	taken into consideration to take villager's	
		which is 2 km but remains	view and increase their awareness.	
		close due to the		
		unavailability of the		
		veterinary health personnel.		
		Due to the unavailability of		
		the veterinary doctor,		
		villagers mostly overlook		
		the diseases of the cattle/		
		animals. This is resulting in		

		the increase of the death toll		
		of cattle/ animals.		
	5	Infrastructure facilities	The cremation ground in the village needs a	Short term
	5	initiastructure racintites	boundary wall. Also a boundary wall is	
			required in the place where the deceased	inter vention
			animals are buried.	
			A boundary wall around the pond which is	
			spread over 3 acres of land is required. The	
			unavailability of boundary wall has resulted	
			in several accidents, especially among the	
			children.	
			A community hall is also required in the	
			village. As during marriage and other	
			functions there is no place to organize them.	
			The respective villages Panchayats are also	
			ready to assist in doing so.	
Phumma	3	Anganwadi	There is no toilet facility and drinking water	Short term
nwal		Infrastructure: The	facility available in the Anganwadi centers	intervention.
		Anganwadi centre in the	due to which the presence of the children	
		village needs urgent	reduced. The infrastructure support may	
		infrastructure. There is no	increase the roll of the children in the	
		toilet facility for children as	Anganwadi. The local authorities and	
		well as for staff. Apart from	village Panchayat's permissions are	
		this, no government tap	required and implementing agency is	
		connection neither hand	required to obtain it before implementing it.	
		pump is available in the		
		centre. The workers of		
		anganwadi have to bring the		
		water from nearest		

		community tap or from neighbour's tap.		
Rajpura	3	School Infrastructure: The	The student-bench ratio is not adequate and	Short terr
51	_		there is no drinking water facility in the	
			school. The water available is from the	
		have infrastructure issues		
			The new building for government middle	
			school is ready and about to be used. There	
			is a submersible installed by the	
		dropout rate can be	government but it also requires an RO	
		reduced.	system as the ground water is not safe for	
			drinking as per the respondents.	
	4	Drainage System: There is	Sewer lines with appropriate disposal	Short terr
		no proper drainage system	system needs to be constructed in the	interventior
		in the village. Due to this,	village to improve the hygiene and	
		there are several health	sanitation levels.	
		issues like cholera,		
		diarrhea, malaria and		
		dengue prevalent in the		
		village.		
Masani	3	Cleanliness of pond	A pond adjacent to the village, where all the	Short terr
			sewerage water flows, is in need of urgent	interventior
			maintenance and cleanliness. The pond is	
			very small in size and sewerage water	
			collected in this pond is leading to several	
			health problems in the village like jaundice,	
			malaria, dengue and cholera. The issue	
			needs to be addressed with proper disposal	
			of the sewerage water in another location	
			and revamping the pond so its water can be	
I				

			purposes.	
			Apart from this, there is also a need of	
			proper spraying and fogging to check	
			mosquito breeding to prevent diseases such	
			as malaria, dengue, etc.	
	4	Kitchen for Mid Day Meal	As per the Mid Day Meal Scheme of the	Short term
		Scheme: The mid day meal	Central Government this is a mandatory	intervention
		in the government primary	requirement and appropriate funds are	
		school is provided but	provided to the State and District	
		during rains the meals are authorities. It needs to be further		
		not provided to the students	investigated as to why the kitchen is not yet	
		as there is no kitchen in the	constructed and if needed the company and	
		school.	state/ district authorities can collaborate and	
			construct a room for the kitchen. This will	
			ensure proper and effective functioning of	
			the scheme for the benefit of the young	
			children in any season.	
Kila	3	School Infrastructure	Two rooms in the government school are	Short term
Bariyan		needs urgent attention.	damaged and about to collapse. Due to this	intervention
			students either have to sit outside or have to	
			adjust in other classrooms with other	
			classes. This is affecting the quality of	
			education. Therefore, there is a need of few	
			classrooms in the school and renovation of	
			the building is also required.	
	4	Renovation of Drainage	The renovation of the sewerage lines which	Short term
		lines: The drainage lines	are damaged can be done by the company.	intervention
		are damaged in the village	The sewerage lines are not cleaned	
		and causing lot of water	regularly and get stagnated. Due to the	
		stagnation in the main	stagnation of the sewerage water, lots of	
		internal roads of the village.	mosquitoes and other health problems are	
L				

The water stagnation is also	on the rise in the village. The maintenance	
a home for mosquito	of sewer lines needs to be taken care of	
breeding. Due to such	with the responsibility of the Panchayat.	
unhygienic conditions, the	Moreover, awareness camps should take	
villagers are prone to	place and solid waste disposal system	
several which is affecting	should be set up with dustbins at common	
the health of the villagers as	points in the village and it should be	
water stagnation.	collected regularly to garbage dumps	
	outside the village. The drainage should be	
	closed with covers. These measures ensure	
	that practices like manual scavenging are	
	not encouraged as they involve caste	
	discrimination. People should be made	
	aware to be responsible for disposing their	
	household waste properly and not litter	
	around in the drainage lines.	
	around in the dramage lines.	

CONCLUDING REMARKS

The baseline survey conducted at this location revealed certain key areas that need urgent attention. Intervention in these areas will work towards growth and development of the villages and its inhabitants in different spheres of the socio-economic arena. Different chapters on data analysis, key findings of the village and interventions give a clear picture of the kind of problems faced by people and the needs that are to be addressed along with priority of the intervention.

Following are certain important considerations which the company must take care of during implementation of the interventions.

IMPORTANT CONSIDERATIONS PRIOR TO IMPLEMENTATION

1. Maintenance of the Projects and Infrastructure

Infrastructure, which will be built by IOCL, should be maintained by the individual or the Panchayat, as per the projects. The common bathrooms, lanes, drain, etc. should be maintained by the Panchayat from their funds, or additional funds from IOCL, and individual taps, toilets, etc. should be maintained by individual households. These considerations should be discussed with the Panchayat prior to starting any of the projects and a written agreement should be signed with them in this context. The maintenance terms should be made clear to the Panchayat members as well as to individual households which will help them in maintaining it. If the Panchayat and individual households need some financial help in maintaining the infrastructure, IOCL can consider providing the same and take a decision on that. The partnership between the organisation and villagers should be framed out clearly and completely, on their terms, before implementing any of the projects. This will start all the projects on very clear and positive note.

2. Caste Discrimination as a Hindrance in Development and Growth

Caste discrimination, on general terms, is evidently present in most parts of our country, either in obvious ways or through subtlety. This fact needs to be kept in mind while implementing any of the projects so as to ensure equal access by all to the facilities made available in addition to preventing encouragement of the phenomenon in the process of development. Facilities, like water tanks in some villages, are also made available on the basis of castes, as people practise untouchability which is a legal offense but practised widely across India. The caste discrimination practised should be taken into consideration before implementing the projects, as all the benefits can get concentrated with the dominant castes. The services should be provided with special emphasis on the socially backward castes as they are doubly marginalised- one because of the lack

of development and the other because of their social backwardness in certain states. Practising untouchability is a crime, according to the Indian Constitution and this principle has to be followed strictly in implementing the projects with equal access being provided to groups from all the castes. In fact, care should also be taken to provide interventions specific to marginalised caste groups as they do not have equal opportunities for access.

3. Linkages between Different Projects

The projects recommended above should be in sync with each other. For instance, roads with drains should be constructed after laying down pipelines, if the water project is to be implemented by IOCL. And the Mobile Medical Van project will be more effective and easy to implement, if there are roads with drains laid down in the villages.

4. Community Ownership of the Projects

The ownership of the projects by the community is a much-needed phenomenon, for the success of any social development project. The labour for all the construction should be drawn from the locals by providing them masonry training, as this will help in income generation and result in semi-skills development of the locals. Semi-skilled persons can be first trained by forming a group across the villages and each semi-skilled labourer can form his own team of people of unskilled labourers. Construction of, say, individual toilets or drainage lines in that particular village becomes the responsibility of the semi-skilled team leader with his/ her group of unskilled labourers. This will be cost-effective, train the people and give them an intrinsic sense of community ownership of the projects. The community can be involved in all the projects, using the method of '*Shram Daan*', which is a very popular concept to engage communities in India. With this, ownership can be generated among people, as they will be involved in building these projects, from the start. The locations of the projects should be decided through discussions with all stakeholders to make it comfortable for majority of the people.

5. The Collaborative Model

All the projects taken up for implementation by IOCL should be in sync with the Local and Central Government Schemes, to avoid duplication. If there are projects previously sanctioned by the government, which are yet to be implemented, they can be supported by IOCL financially in a collaborative model with the Government. Collaboration with the Government is necessary for the sustainability of the projects and for increasing their usability. India is a welfare state and accordingly the state has provisions for every single aspect of human development. The Central and State Governments have a variety of schemes available to support the rural population, but the areas of contention are *availability, accessibility and affordability*. Lack of attention, funds or will

in any of these areas makes the implementation of these schemes weaker. The level of awareness is also not particularly high, because of which people are not able to avail their basic rights. The Government can be approached by the Company to provide the support needed for reaching out to people and for optimum utilisation of available resources for holistic development.

BIBLIOGRAPHY

(2013). Guidelines on Corporate Social Responsi bility and Sustanibility for Central Public Sector Enterprises.

Ltd, I. O. (n.d.). Indian Oil. Retrieved from Official website of IOCL: http://www.iocl.com/

Rajaretnam, P. A handbook on Basic Statistics for Social Scienses.

T.Rajaretnam, S. P. (2010). Vidharbha Baseline Survey of Rural livelihoods. Mumbai: Tata Institute of Social Sciences.

India, G. o. (2010-11). Census of India. Retrieved 2013, from censusindia:http://www.censusindia.gov.in/

Zile, C. V. (2012). India's Mandatory Corporate Social Responsibility Proposal: Creative Capitalism Meets Creative Regulation in the Global Market. *Asian-Pacific Law & Policy Journal, 13:2*, 269-303.

Ministry of MSME, G. o. (n.d.). *Brief Industrial Profile of Sangrur District*. Retrieved from http://dcmsme.gov.in/dips/Sangrur.pdf

ANNEXURES Village Questionnaire

IDENTIFICATION PARTICULARS

Name of District:	Code:
Name of Taluka:	Code:
Name of Block:	Code:
Gram Panchayat:	Code:
Name of Village:	Code:
Informant name Informant status Status Code	
Date of completion of interview (DD/MM/YY): /	/

P: Population, Land and Water

Qn.	QUESTIONS AND FILTERS	CODING CATEGORIES
P01	WRITE YEAR OF ENUMERATIONAND RECORD HOUSEHOLDS AND POPULATION OF THE VILLAGE (CODE 0000 UNDER YEAR IF NO ENUMERATION)	YEAR
P02	Total, irrigated, non-irrigated (rain fed), grazing (pasture) land, forest land, wasteland area in the village (RECORD ALL FIGURES IN ACRES)	TOTAL AREA1IIRRIGATED2INON-IRRIGATED3IGRAZING4IFOREST5IWASTELAND6I
P03	What extent of agricultural land in the village suffers from flood proneness, alkalinity, water logging, and soil erosion? (RECORD IN ACRES OR WRITE CODES IN BOXES – 1 ALMOST NIL, 2 SOME, 25%, 3 HALF, 50%, 4 MORE THAN HALF, 75%, 5 ALMOST ALL) DEFINITIONS :	FLOOD PRONENESS
	1. FLOOD PRONENESS – CAN BE EASILY AFFECTED BY FLOODS IN RIVER	

	 NEARBY ALKALINITY – OR CLAY SOIL, THAT IS HIGH IN ALKALINE, LOW INFILTRATION CAPACITY CAUSING RAIN WATER TO EAILSY STAGNATE/ LOG WATER LOGGING - THE WATER TABLE (LEVEL) OF THEGROUND WATER IS TOO HIGH FOR AGRICULTURE TO TAKE PLACE SOIL EROSION – SOIL THAT GETS WASHED AWAY EASILY BY WIND OR WATER DROUGHT PRONENESS – LAND THAT IS SUFFERS NORMALLY FROM DROUGHTS, I.E. LACK OF RAINS IN THE REGION 	
P05	What are the various sources of irrigation in the village? (NOTE: WITH OR WITHOUT MOTOR) (ASK FOR ALL SOURCES)	TANK/POND.ASTREAM/RIVER.BCANAL.COPEN WELL.DTUBE WELL.EOTHERFNONE.X
P06	What are the various sources of water for the use of households in the village? Rank them in order of importance?	TANK/POND1 STREAM/RIVER2 CANAL3 OPEN WELL4 TUBE WELL5 PUBLIC TAP/OVERHEAD TANK6 PRIVATE (HH) TAP7 TANKER WATER8 OTHER 9
P07	Number of public/common tap water posts and number of households with individual tap connections by the Government.	PUBLIC/COMMON TAP POINTS

Q: Livestock, Crops and Livelihoods

Qn.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKP
Q01	What are the major crops grown in the village and in how much acres of land area these crops were grown during the last one year?	CROP NAME CODELAND AREA	

			I	
Q02	What are the sources of livelihood for the people of the village? ENCIRCLE MULTIPLE OPTIONS	OWN FARM ACTIVITIES AGRICULTURAL LABOUR NON-AGRI LABOUR (RURAL) FACTORY LABOUR (MODERN) SALARIED EMPLOYMENT PETTY BUSINESS/TRADE CATTLE REARING COLLECT & SALE FOREST/M PRODUCTS RENT/PENSION/REMITTANCE ARTISAN (TRADITIONAL)	B D F G IINING H	
Q03	Accessibility of the forest/mining area to the people of the village for their livelihoods? What purposes? ENCIRCLE MULTIPLE OPTIONS (YES – CAN ACCESS, NO – CANNOT ACCESS, NA – NO FOREST/MINING)	CODE FIREWOOD1 FRUIT/NUTS/LEAVES/2 HUNTING3 CULTIVATION4 COAL COLLECTION5 OTHER 6	 A B C A B C A B C A B C 	
Q04	Extent of Household of the village (at least one member) temporarily or for certain periods migrates to other places in search of work.	YES, MANY MIGRATE YES, FEW MIGRATE RARE	·····1 ·····2	06
Q05	Where do people migrate for work?	Within the state (Agri Labour)1 Within the state (Non-Agri Labour)2 Outside state (Agri Labour)3 Outside state (Non-Agri Labour)4 Other5		
Q06	How many children of this village are currently (this year) staying and studying outside the village ?	NUMBER OF CHILDREN		

R: Religion, Caste, Recreation and Transport Facilities

Qn.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKP
R01	What is the religious composition of this village?	Religion HHs	
	(ASCERTAIN AND RECORD APPROXIMATE NUMBER/PERCENTAGE OF HOUSEHOLDS)	HINDU1 MUSLIM2	
		CHRISTIAN	
		BUDDHIST4	
		SIKH5	
		JAIN6	
		OTHER7	

R02	What is the caste/ tribal composition of this village? (ASCERTAIN AND RECORD APPROXIMATE PERCENTAGE OF HOUSEHOLDS) (CATEGORY – 1 GENERAL, 2 SCHEDULED CASTE, 3 SCHEDULED TRIBE, 4 OTHER BACKWARD CLASS, 5 NOMADIC TRIBE, 6 DENOTIFIED TRIBE)	Caste/Tribe CATG. Code HHs 1
R03	Recreation/Common facilities available in the village such as playground, Samaaj Mandir, gymnasium (vyayamshala), conference hall etc. (ASK ALL SOURCES)	PLAYGROUNDA SAMAAJ MANDIRB GYMNASIUM (VYAYAMSHALA)C COMMUNITY HALLD LIBRARYE CREMATION/BURIAL PLACEF OTHER G
R04	Which are the nearest towns to which people of your village often go for buying household goods and for services including medical services? How far they are from your village (km)? How many trips public/state transport buses MAKE in a day to these towns from or through your village?	Town Distance Trips 1

S: Physical, Educational and Health facilities

Qn.	Items		Distance to the nearest item	SKIP						
	DISTANCE CODES: 00 =Within village/<1 applicable/none nearby	km, 01 to 94 k	xms: (KMS As It Is), 95 =95+ kms, 98 =Don"t know, 9	9 Not						
S01	Nearest Physical Facilities									
	FACILITIESCODECEMENT/ TAR ROAD1	DISTANCE	VILLAGE / TOWN NAME							
	BUS STOP2									
	PUBLIC TELEPHONE BOOTH.3									
	DAILY/EVENING MARKET4									
	WEEKLY MARKET5									
	PDS SHOP6									
	Grocery shop7									
	DTP/XEROX CENTRE8									
S02	Nearest Local Institutions									
	INSTITUTIONS CODE	DISTANCE	VILLAGE/ TOWN NAME							
	POST OFFICE1									
	RAILWAY STATION2									
	POLICE STATION3									
	GRAM PANCHYAT OFFICE4									
	COOPERATIVE SOCIETY5									
	BANK FOR S/B ACCOUNT6									
	BLOCK DEVT OFFICE7									
	TALUK HEADQUARTERS8									
	DISTRICT HEADQUARTERS9									
	WAREHOUSE10									
	APMC/MANDI11									
S03	Nearest Educational Institutions									
	FACILITIES CODE	DISTANCE	VILLAGE/ TOWN NAME							
	PRE-PRI/NURSERY SCHOOL1									
	GOVT PRIMARY SCHOOL2									
	CHARITABLE PRIMARY3									
	PVT PRIMARY SCHOOL4									
	GOVT SECONDARY SCHOOL5									
	CHARITABLE SECONDARY6									
	PVT SECONDARY SCHOOL7									
	HIGHER SEC SCHOOL8									
	DEGREE COLLEGE9									
	ITI/POLYTECHNIC10	├─╟─┥								
	VOC TRAINING CENTRE11									

S04	Nearest Health/Medical Facilities					
	FACILITIES CODE	DISTANCE	VILLA	GE/ TOWN NAME		
	HEALTH SUB-CENTRE1					
	PRIMARY HEALTH CENTRE2					
	CHC/GOVT GEN HOSPITAL3					
	PVT CLINIC (RMP+)4					
	PVT CLINIC (MBBS/BAMS+).5					
	PRIVATE HOSPITAL6					
	Ayush HOSPITAL7					
	VETERINARY CLINIC8					
	MEDICAL SHOP/CHEMIST9					
	ASHA WORKER10					
	DAI(TRAINED/UNTRAINED).11					
S05	Does any mobile medical team visit	this village?		YES	1	
		C		NO	2-	→ S09
S06	How often does the team visit this v	/illage?		DAILY	1	
		U U		FEW DAYS A WEEK.	2	
				WEEKLY		
				FORTNIGHTLY/LESS	FRQNTLY4	
S07	By whom is the Mobile Medical Var	service prov	/ided?	BY PHC/CHC	1	
	(PROVIDE DETAILS OF THE AGENCY)			BY MISSIONARIES.	2	
				BY COMPANY	3	
				BY OTHERS	4	
S08	What services are provided by Mob	ile Medical \	/ans?	MINOR AILMENT TR	EATMENTA	
	MCH – Mother Child Healthcare			CHRONIC DISEASES	TREATMENTB	
				MCH SERVICES	C	
				BLOOD/URINE TEST	'SD	
				SCANING RELATED	TESTSE	
				BP/DIABETIC RELA	TED TESTSF	
				HIV/STI RELATED	SERVICESG	
				OTHER	Н	
S09	Number of Anganwadi centres in th	e village		ANGANWADI CENTRE	ls	
S10	Number of self-help groups (SHGs)	in the village	for	SHGS' FOR WOMEN.	1	1
-	women, men, mixed, production/bu	-		SHGS' FOR MEN	2	11
	based			SHGS' MIXED] [

T: Social Organizations, Government, NGO Functionaries; MGNREGS and other schemes

T01: Details of social/community organizations such as SHGs, Women clubs, youth clubs, farmers clubs within and outside your village that serve the village.

Name of Institution	Туре	No. of Members	Active or not?	r Activities and beneficiaries in the last one year (Record all activities and number of beneficiaries by activity)		
				Activities	Number of beneficiaries	
(1)	(2)	(3)	(4)	(5)	(6)	

Col (2) Organisation type: 01 Peoples Organisations (e.g. Water and Sanitation Committee), **02** Youth Club/Group, **03** SHG, **04** Mahila Mandal, **05** Bhajan Mandali

Col (4)01 Yes, 02 No, 03 Don't know

Col (5) Activities:01 Mid-Day Meal food preparation, , 02 Awareness creation, 03 Literacy/Education providing, 04 Health care activities, 05 Developmental activities, 06 Rehabilitation/Disaster control activities, 07 Giving early warning system, 08 Working on environment issues, 10 Working on Policies/advocacy 11 Others.

Col (6)Beneficiaries: Record number of beneficiaries by activity.

T02: Which Government functionaries and NGO workers visit your village?How often?

Sector	Sr. No.	Who visited (designation)	Frequency of visit
(1)	(2)	(3)	(4)
1. Agriculture department (e.g. Agriculture	1		
extension officer, patwari)	2		
	3		
2. Rural development (Gram sevak, Collector,	1		
BDOs, CDOs, DM, Panchayat officials)	2		
	3		
3. Health and social welfare (e.g. Doctors, ANM,	1		
ASHA Health Inspector, Anganwadi Worker/	2		
Anganwadi Sahayika, Supervisor/CDPO)	3		
4. Other government functionaries	1		
	2		
	3		
5. NGOs	1		
	2		
	3		

Col (3):Who visited: 01 Agriculture extn officer, 02 Patwari, 03 Gram sewak, 04 BDO, 05 Panchayat official, 06 Health worker, 07 PHC doctor, 08 ANM, 09 Health inspector, 10 Anganwadi supervisor/ CDPO, 11 Veterinary doctor, 12 ASHA, 13 Anganwadi worker, 14 NGO people, 15 Other

Col (4):Frequency of visit: 1 Daily, 2 Few days a week, 3 Weekly, 4 Occasionally, 5 Rarely, 6 Other

T03:MGNREGS or NGOs implemented employment and income generation schemes in this village in the past 12

months

Program	Implemented by	No. of Job	No. of be	neficiaries	Minimum Wage	-	
	whom?	Cards (If	Males	Females	(As per Panchayat)	Implementation	
		MGNREGA)					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

Column 1: 1 IAY, 2 NREGA, 3 SJGSY, 4 NGY, 5 JGSY, 6 Others.

Column 2: 1 Govt., 2 CSR, 3 NGO, 4 Other

U: Health, Sanitation and Education Institutions

U01: Health Institutions (Hospitals/Clinics) in and around the village

Name and address of the institution	Туре	Distance	Services available	Cost of services	Utilization by villages	Reasons for non-utilization
						of services
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Col (2) Type: 1 PHC, 2 Govt. hospital, 3 Private hospital, 4 CSR hospital, 5 Private clinics, 6 Other

Col (3) Distance: Distance in completed km, **00** if <1 km or within the village

Col (4) Services available: 1 Minor Ailment Treatment, 2 Chronic Diseases Treatment, 3 MCH Services, 4 Blood/Urine Tests, 5 Scaning Related Tests, 6 BP/Diabetic Related Tests, 7 HIV/STI Related Services, 8 Other

Col(5)Cost of services: 1 Free, 2 Free but tips paid, 3 Subsidised, 4 Reasonable charges, 5 Very high charges

Col (6): Utilization by Villages: 1 Most people go, 2 Many people go, 3 Few go, 4 Rich/affordable people go, 5 Rarely people go

Col (7) Reasons for Non-Utilization: 1 No Facility Nearby, 2 Timing not Convenient, 3 Health Personnel often absent, 4 Waiting time too long, 5 Poor Quality of Services, 6 Unaffordable, 7 Other

Sr. No.	Location (Record nearest landmark)	Type of toilet	No. of pits/ toilets	Provided by	Maintained by	Water facility	Payments	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

U02: Community Toilet Facility available in the village (RECORD ONLY ONES IN USE)

Col (3) Type of toilet: 1 Pit, 2 Flush, 3 Other, 4 None

Col (5) Provided by: 1 Panchayat, 2 NGO, 3 CSR, 4 Other

Col (6) Maintained by: 1 Panchayat, 2 Local people, 3 NGO, 4 Other, 5 None

Col (7) Water facility: 1 Overhead Tank, 2 Well, 3 Bore well, 4 Storage Tank, 5 Other, 6 None

Col (8) Payments: 1 By Panchayat, 2 By User, 3 Through CSR, 4 None

Col (9) Remarks: Record sanitation & infrastructural condition of the toilet as per interviewer's observation

U03: Educational Institution in and around the villages (Up to Higher Secondary Education)

Name of Institution	Run by	Standard (from-to)	Medium of instruction	Transport facility by	Number of students	Mid-day meals	Cost of education
		. ,		institution		served	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

Col (2) Run By: 1 Government, 2 Private Aided, 3 Private Unaided, 4 Missionary/Trust, 5 CSR, 6 Other

Col (4) Medium of Instruction: 1 Hindi, 2 English, 3 Regional Languages

Col (5) Transport Facility by Institution: 1 Bus, 2 Auto Rickshaws, 3 Cycle Rickshaws, 40ther, 5 None

Col (7) MDM Served: 1 Yes, 2 No

Col (8) Cost of education: 1 Free, 2 Subsidised, 3 Reasonable charges, 4 Very high charges

V: Schemes and Facilities for Special Groups and Overall Developmental Activities

V01: Collect List and Record Details of Differently-abled Persons

Vocational skills need to be assessed from the individual or dependents.

Sr. No.	Name	Parents		•		Education	Occupation	Type of	Vocational	Skill
		name	(M=1, F=2)	(As it is)	status			disability	skill	interested in
			F-Z)	15)						111
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

Col (6) Marital Status: 1 Unmarried, 2 Married, 3 Widowed, 4 Divorced, 5 Separated/ Deserted, 6 Other

Col (7)Education (completed):00 Illiterate, 01 Literate without schooling, 01-05 Standard (if literate only), 06-10 Standard, 11-12 Higher secondary, 13-15 BA/BSc/B.Com Degree course, 16-17 MA/MSc/M.Com Degree course, 18 M.Phil doing/completed, 19 PhD doing/completed, 21-29 Years of engineering/technical/management degree course, 31-39 Years of Medical/health degree course, 41-49 Years of Post-SSLC certificate/diploma/vocational course (ITI, polytechnic, VHSC's and other courses) 51-59 Years of Pre-SSLC certificate/diploma/vocational course

Col (08): Occupation:00 None, 01 Farming, 02 Agriculture labour, 03 Non-agriculture labour, 04 Salaried (scale based), 05
Salaried (local/consolidated), 06 Artisan/craftsman/household industry, 07 Contractor/broker, 08 Petty business/trade, 09
Livestock rearing, 10 Local services (including traditional services), 19 Other (specify)

Col (9):Type of Disability: 1 Physical Disability, 2 Mentally Challenged, 3 Visual Impairment, 4 Hearing Impairment, 5 Other

Col (10 & 11):Type of skill:

Modern: 11 Computer/TV/Mobile/Electronic goods sale/service, **12** Home appliances sale/service, **13** DTP Centre/Xerox/Bookbinding/Screen-printing and related work, **14** Catering/bakery/hotel-related, **15** Tuition/Training-related, **19** Other modern skills,

Household Industry: 21 Tailoring/embroidery, 22 Weaving/dying/spinning/Textile-related, 23 Toy/Decoration-making, 24 Beedi/Agarbathi/Soap/Home use items making, 25 Basket/Carpet/Home utilities making, 26 Papad/Sweet/Eatable making, 29 Other household industry related skills,

Agricultural-related: **31** Thresher/Harvester/Tractor operation, **32** Horticulture/Sericulture training, **33** Progressive farming techniques (including vermiculture and related skills), **34** Insecticide spraying/related operation, **35** Food processing, **39** Other agricultural skills,

Service-oriented: **41** Driving vehicles, **42** Photography/Photo studio, **43** Healthcare (nursing, midwifery and related work), **44** Beautician services, **49** Other services,

Small Scale Industry: **51** Motor mechanic (repair and related work), **52** Welding/Electrical repair work, **53** Jewellery or bead making, **54** Construction related work, **59** Other small scale industry skills,

Traditional skill: 61 Cobbling, **62** Leather/related work, **63** Carpentry, **64** Masonry, **65** Pottery, **66** Stone-carving, **67** Wood-carving, **68** Metal work (ironsmith and related skill), **69** Other Traditional skills.

Sr. No.	Name	-		Age	Marital	Education	Occupation	Type of	Amount/	Problems
		Husband's	(M=1,		status			benefit	month	
		name	F=2)						(As It is)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

V02: Collect List and Record Details of Beneficiaries under Different Social Security Schemes

Col (6)Marital Status:1 Unmarried, 2 Married, 3 Widowed, 4 Divorced, 5 Separated/ Deserted, 6 Other

Col (9) Type of Benefits: 1 Old Age Pension Scheme, 2 Widow Pension Scheme, 3 Disability Pension Scheme, 4 Other

Col (11) Problems: 00 Have no problems, 1Do not get all benefits, 2 Irregular, 3 Do not get any benefit, 4 Other

V03: Details of development activities by non-Governmental organizations (NGOs including under CSR) in the past 3 years.

Sr. No.	Nature of	Agency	Year of	Approx.	No. of	Maintenance	Functional or
	activity	provided	activity	cost	beneficiaries By		not?
		the benefit	(As it is)	(As it is)	(if applicable)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

Col (2) Nature of Activity: 1 approach road, 2 streetlight, 3 hand pumps, 4 tanker water supply, 5 watersheds, 6 renovation of buildings, 7 supply of equipment, 8 medical facilities (clinic, hospital, MMU), 9 Other

Col (3) Agency Provided the Benefit: 1 State Govt., 2 Central Govt., 3 CSR, 4 Panchayat, 5 Missionary/ Trust, 6 Other

Col (7) Maintenance by: 1 State Govt., 2 Central Govt., 3 CSR, 4 Panchayat, 5 Missionary/ Trust, 6 Other

Col (8) Functional or not?: 1 Yes, 2 No, 3 Need urgent Maintenance

W: Major Problems of the Village

W: Major Problems (Could Be Related To Health, Nutrition, Sanitation, Education, Livelihood, Disaster, Etc.) That

Require Attention According To Respondents

Household Questionnaire

(As this questionnaire requires input from male and female members of household, it should be administered to head of household in the presence of other responsible adult male and female

members.)

IDENTIFICATION PARTICULARS							
Before Starting Inter	view						
Name of District		Code:					
Name of Taluka		Code:					
Name of Block		Code:					
Gram Panchayat		Code:					
Name of the							
village	(Code:					
Date of Interview (DD Time of starting Inte	/MM/YY):// rview (HH.MM):	AM/PM					
After Ending Intervie	w						
Time of ending interv	iew (HH.MM):	·					
AM/PM							
Names of Respondents	1:	MID:					
	2:	MID:					
	3:	MID:					
Name of Interviewer:		Code:					
After Checking/Editin	g Questionnaire						
Name of Supervisor: _		Code:					
Name of Editor:		Code:					

A: Household, Water and Sanitation background

Qn.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
A01	What is your religion?	HINDU. 1 MUSLIM. 2 CHRISTIAN. 3 SIKH. 4 BUDHHIST. 5 JAIN. 6 OTHER 7 NO RELIGION. 8	
A02	What is your caste or tribe?	CASTE/TRIBE	
A03	Do you come under scheduled caste, scheduled tribe, nomadic tribe, or other backward class? Which one?	SCHEDULED CASTE.1SCHEDULED TRIBE.2NOMADIC TRIBE.3DENOTIFIED TRIBE.4OTHER BACKWARD CLASS (OBC)5GENERAL.6DON'T KNOW.7	
A04	TYPE OF HOUSE (RECORD AS PER GUIDELINES BASED ON TYPE OF WALL, ROOF AND FLOOR)	RCC 1 PUCCA 2 SEMI-PUCCA 3 KUCHCHA 4 HUT 5 TENT (MAKESHIFT) 6	
A05	Is the house your own, rented, rent-free, sanctioned/provided under some scheme? (READ OUT ALL THE OPTIONS TO RESPONDENT & PROBE)	CONST/PURCHASED/FAMILY(OWN)1 RENTED2 RENT-FREE(EMPLOYER'S)3 RENT-FREE(RELATIVE'S)4 LAND FREE & CONSTRUCTION OWN5 CONST/ALLOTED WITH SUBSIDY6 ALLOTED UNDER SCHEME7 OTHER8	▲07 ► A08
A06	Allotted under which scheme?	INDIRA AWAS YOJNA1 GHARKUL YOJNA2 BY CONCERNED PSE UNDER REHAB3 OTHER4	
A07	Do you have registered papers (patta) of this land?	YES1 NO2	
A08	HOUSE ELECTRIFIED?	YES1 NO2	
A09	What type of toilet facility do you have?	FLUSH TOILET (OWN) 1 PIT TOILET (OWN) 2 FLUSH TOILET (COMMUNITY) 3 PIT TOILET (COMMUNITY) 4 OTHER 5 NONE 6	► A11

A10	If own, how was the toilet constructed?	FULLY OWNER EXPENSE 1 SHARED BY HOUSEHOLDS 2 WITH SUBSIDY 3 FULLY AT GOVT/NGO EXPENSE 4 OTHER 5
A11	Would you like to have a (flush) toilet for your household? (ASK FOR THOSE HAVING "PIT TOILET (OWN)" ALSO)	NOT INTERESTED1 YES, IF PROVIDED FREE2 YES, IF PROVIDED SUBSIDY (MATERIAL/CASH)3 YES, OTHER4
A12	Is there sullage nuisance surrounding your house? What is the nature of sullage nuisance? (INTERVIEWER: MAKE AN INDEPENDENT ASSESSMENT AND RECORD) (ASK ALL THE OPTIONS & MULTIPLE RESPONSE POSSIBLE)	RESPINTWRNONEXXWATER STAGNATIONAADRAINAGE/SEWAGEBBCATTLE BASED WASTECCOPEN AIR DEFECATIONDDWASTE DUMPINGEEOTHERFF
A13	From where do you fetch water for your household? (ASK FOR ALL SOURCES/ MULTIPLE RESPONSE POSSIBLE) FOR SELECTED SOURCES, RECORD DISTANCE IN BOXES AS PER CODES: 1 WITHIN HOUSE 2 JUST OUTSIDE, 3 WITHIN 1/2 KM, 4 WITHIN 1 KM, 5 MORE THAN 1 KM	TAP (BY OWN)A OWN TAP BY GOVT/PANCHAYATB OWN HANDPUMPC OWN OPEN WELLD NEIGHBOUR'S TAPE COMMUNITY TAPF COMMUNITY HANDPUMPG COMMUNITY OPEN WELLH OTHERI
A14	What types of fuel does your household use for cooking? (ASK FOR ALL SOURCES/ MULTIPLE RESPONSE POSSIBLE)	GRASS/CROP RESIDUE/WOODA COWDUNGB COAL/CHARCOALC KEROSENED BIOGASE SOLAR ENERGYF LPG/NATURAL GASG ELECTRICITYH OTHERI

B: Household composition

B01	In total how many members are there in your household		
	including those staying away for studying, working, delivery	NUMBER OF MEMBERS	
	and other purposes?		

SI.No.								Studying?	Reasons for	Occupation	
(MID)	Name of Member	Head	Status	(M=1) F=2)	Completed	Status (10+)	(7+)	(Y=1,N=2) (3-24)	dropout/no schooling (7-18)	Primary	Secondary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
01		01									
02											
03											
04											
05											
06											
07											
08											
09											
10											
11											
12											

B02: Please give following details for all members of your household, starting from the head.

Col (3) Relation to Head:01 Head, 02 Spouse, 03 Son/Daughter, 04 Son-in-law/Daughter-in-law, 05 Grandchild, 06 Father/mother, 07 Father-in-law/Mother-in-law, 08 Brother/Sister, 09 Brother-in-law/Sister-in-law, 10 Uncle/Aunty, 11 Niece/Nephew, 12 Grandfather/Grandmother, 13 Other relative, 14 Servant/Employee/Other (specify)

Col (4) Residential status:1 Currently residing, 2 Studying elsewhere, 3 Working elsewhere, 4 Staying elsewhere but not studying or working, 50ther (specify).

Col (5) Sex:1 Male, **2** Female. **Col (6) Age:** Record age in completed years, **00** if not completed one year, **96** if age 96 or above.

Col (7) Marital Status: 1 Unmarried, 2 Married, 3 Widowed, 4 Divorced, 5 Separated/ Deserted, 6 Other (specify)

Col (8) Education (completed):00 Illiterate, **01** Literate without schooling, **01-12** Write standard as it is, **13** Bachelors 1st Year, **14** Bachelors 2nd Year, **15** Bachelors 3rd Year/ Completed Graduation, **16** Masters 1st year, **17** Masters 2nd year/ Completed Post-graduation, **18** M.Phil doing/completed, **19** PhD doing/completed, **21-29** Years of engineering/technical/management degree course, **31-39** Years of Medical/health degree course, **41-49** Years of Post-SSLC certificate/diploma/vocational course (ITI, polytechnic, VHSC's and other courses) **51-59** Years of Pre-SSLC certificate/diploma/vocational course, **60** Other (specify)

Col (10): (MULTIPLE RESPONSE POSSIBLE) Reasons for dropout/Not gone to school (if code 2 in Col. 9):1 To work and support household, **2** Required to attend domestic chores, **3** Education/higher education not considered important, **4** Too poor in studies/failed/irregular to school, **5** School too far/sending girls not safe, **6** Poor quality of teaching/teachers not available or rude, **7** Too high fees/expenses, **8** Frequent shifting of residence, **9** Physical/mental disability/illness, **10** Quit education due to early marriage **11** Other (specify)

Col (11, 12): Activity:00 Housewife, 01 Farming, 02 Agriculture labour, 03 Non-agriculture labour, 04 Salaried (scale based), 05 Salaried (local/consolidated), 06 Artisan/craftsman/household industry, 07 Contractor/broker, 08 Petty business/trade, 09 Livestock rearing, 10 Local services (including traditional services), 19 Other (specify) 97 None.

MID	Name of Student	Standard studying	Type of Institution	Distance to institution from home	Mode of travel	Frequency of mid-day meal (ASK UPTO STANDARD	Benefits received in one year (RECORD UP TO 5
(1)	(2)	(3)	(4)	(5)	(6)	8TH) (7)	BENEFITS) (8)

Col (1) & (2) MID & Name of Student: RECORD AS PER TABLE B02

Col (3) Standard studying: Codes as in Col (8) of Table B02, 00 Pre-school education.

Col (4) Type of Institution: 1 Govt, 2 Private-aided, 3Private-unaided, 4Other (specify)

Col (5) Distance to institution from home: Distance in completed km as it is, 00 if less than 1 km or within the village.

Col (6) Mode of travel:0 Walk, 1 Bicycle, 2 Scooter/Bike/etc, 3 Auto/Taxi/Cycle Rickshaw, 4 Bus, 5 Train, 6 Other (specify)

Col (7) Frequency of mid-day meal: 0 No, 1 Once a week, 2 Few days a week 3 All the days

Col (8) Benefits received:0 None **1** Food supplements/ration, **2** Scholarship **3** Fee concession, **4** Uniforms, **5** Books & stationery, **6** Bus/train pass, **7** Health facilities, **8**. Bicycle **9**Other (specify).

	Did you or any of your household members receive any vocational skill training in the last 3 years?	YES1	
_	(READ THE LIST OF VOCATIONAL SKILLS)	NO2-	C01

B05: LIST ALL THE PERSONS WHO RECEIVED SKILL TRAINING AND ASK DETAILS (IF RECEIVED MORE THAN ONE TRAININGS, CONSIDER THE LATEST ONE COMPLETED)

MID	Name of person	Type of Skill	Agency provided training	training	and year	Engaged in this activity for income generation	If not engaged, why?
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

Col (1) & (2) MID & Name: RECORD AS PER TABLE B02

Col (3) Type of skill: **Modern: 11** Computer/TV/Mobile/Electronic goods sale/service, **12** Home appliances sale/service, **13** DTP Centre/Xerox/Bookbinding/Screen-printing and related work, **14** Catering/bakery/hotel-related, **15** Tuition/Training-related, **19** Other modern skills (specify),

Household Industry: **21** Tailoring/embroidery, **22** Weaving/dying/spinning/Textile-related, **23** Toy/Decoration-making, **24** Beedi/Agarbathi/Soap/Home use items making, **25** Basket/Carpet/Home utilities making, **26** Papad/Sweet/Eatable making, **29** Other household industry related skills (specify),

Agricultural-related: **31** Thresher/Harvester/Tractor operation, **32** Horticulture/Sericulture training, **33** Progressive farming techniques (including vermiculture and related skills), **34** Insecticide spraying/related operation, **35** Food processing, **39** Other agricultural skills (specify),

Service-oriented: **41** Driving vehicles, **42** Photography/Photo studio, **43** Healthcare (nursing, midwifery and related work), **44** Beautician services, **49** Other services (specify),

Small Scale Industry: **51** Motor mechanic (repair and related work), **52** Welding/Electrical repair work, **53** Jewelry or bead making, **54** Construction related work, **59** Other small scale industry skills (specify),

Traditional skill: 61 Cobbling, **62** Leather/related work, **63** Carpentry, **64** Masonry, **65** Pottery, **66** Stone-carving, **67** Wood-carving, **68** Metal work (ironsmith and related skill), **69** Other Traditional skills (specify).

Col (4) Agency provided training: 1 NGO, 2 Government, 3 Charity organization, 4 CSR/ By Company(specify name) 5 Other (specify)

Col (7) Engaged in this activity: 1 Wage employed, 2 Self-employed, 3 Both, 4 Pursuing course training 5 Not engaged

Col (8) If not engaged, why?:00 Not Applicable **01** Financial (Credit) constraints, **02** Time constraints, **03** Marketing problems, **04** Labour problems, **05** Electricity problems, **06** Raw materials problems, **07** Family problems, **08** Complying rules and regulations, **09** Shifted to better income source, **10** This skilled work not in demand, **11** Married and changed work, **12** Family/Child care commitments, **19** Other (specify).

C: Health seeking behaviour

C01	If household members fall sick, where do you go or whom do you consult first?	TRADITIONAL HEALER/DAI1LOCAL DOCTOR/RMP2CHEMIST SHOP3MOBILE CLINIC4SHC/ASHA/ANGANWADI5PHC/CHC6GOVT HOSPITAL7PRIVATE CLINIC8PRIVATE HOSPITAL9COMPANY/AIDED HOSPITAL10NO TREATMENT11DEPENDS ON AILMENT12OTHER13	
C02	During the last 12 months, which are the agencies did you/your household members visit for consultation and/or treatment? (ASK FOR ALL SOURCES/ MULTIPLE RESPONSE POSSIBLE)	TRADITIONAL HEALER/DAIA LOCAL DOCTOR/RMPB CHEMIST SHOPC MOBILE CLINICD SHC/ASHA/ANGANWADIE PHC/CHCF GOVT HOSPITALG PRIVATE CLINICH PRIVATE HOSPITALI COMPANY/AIDED HOSPITALJ OTHERK NO TREATMENTX NOBODY FELL SICKY	

Birth Details

C03	Did any woman in your household give birth to a child in the last 3 years	YES1	
	(that is, since January 2010)?	NO2 -	► D01

CO4: Please give the following details in respect of all the **births**, **including live and still births** (OCCURRED IN

THE LAST 3 YEARS).

MID of	Name of	Name of	Sex	Date of	Place	Mother's	Order	Maternity	Birth	If child died,
Mother	Mother	Child	of	birth	of	age at	of	allowance	registration	age at death
			child		birth	birth	birth			(0-3)
(1)	(2)	(3)		(5)		(7)		(9)	(10)	(11)
			(4)		(6)		(8)			

Col (1) & (2) MID & Name: RECORD AS PER TABLE B02

Col (4) Sex of child:1 Male, 2 Female.

Col (5): Date of birth: Exact date of birth (DD/MM/YY) or at least month and year of birth need to be recorded.

Col (6) Place of birth:1 Government Maternity Centre/General Hospital, 2 Private Maternity Centre/Hospital, 3 PHC/CHC, 4 Health sub-

centre, **5** Home by Nurse/doctor, **6** Home by birth attendant, **7** Home by other, **8** Other (specify).

Col (7): Age of mother at child birth: Age of the mother when the child was born;

Col (8): Order of birth: Order of birth to the mother, irrespective of survival status of the children. 1 first birth, 2 second birth, and so on.

Col (9): Maternity Allowance (In Rs.): Allowance given for the delivery by Government or NGOs usually to meet transport and hospital expenses, under Safe Delivery Scheme.

Col (10) Birth Registration: 1 Yes Registered, 2 No Not Registered, 3 Certificate Awaited, 4 Status Not Known, 5 Other (specify).

Col (11): If died, age at death: **0** Still Birth; **Record the age** at death in completed days, if the child died within 2 months of birth (xx days), in completed months if died within 2 years (xx months) and in completed years if died after 2 years (xx years).

D: Landholding and Livestock

D01	Does your household own any agricultural land including any plantation land?	YES1 NO2 → D06
D02	How much agriculture land do you own? (RECORD IN LOCAL UNITS, IF REQUIRED)	ACRES
D03	How much land do you cultivate? (RECORD IN LOCAL UNITS, IF REQUIRED)	ACRES
D04	How much of the land cultivated by you is irrigated (total owned, rented, encroached, etc.)? (RECORD IN LOCAL UNITS, IF REQUIRED)	Nil0 → D06 ACRES

What are the sources of irrigation? NOTE: DO NOT RECORD RAIN AS A METHOD OF IRRIGATION (ASK FOR ALL SOURCES/ MULTIPLE RESPONSE POSSIBLE)	CANALA PONDB WELLC RIVERD MOTOR PUMPE TUBE WELLF BORE WELLG DAMH OTHERI NONEX	
Does your household own any livestock? (READ LIVESTOCK LIST)	YES1 NO2	► _{E01}
Please give the list of livestock and numbers you possess. (RECORD 99 IF NUMBER OF LIVESTOCK 99 & ABOVE) (ASK FOR ALL SOURCES/ MULTIPLE RESPONSE POSSIBLE)	HE BUFFALO. A SHE BUFFALO. B COW. C BULLOCK. D SHEEP. E GOAT. F PIGGERY. G POULTRY. H OTHER I	
	NOTE: DO NOT RECORD RAIN AS A METHOD OF IRRIGATION (ASK FOR ALL SOURCES/ MULTIPLE RESPONSE POSSIBLE) Does your household own any livestock? (READ LIVESTOCK LIST) Please give the list of livestock and numbers you possess. (RECORD 99 IF NUMBER OF LIVESTOCK 99 & ABOVE) (ASK FOR ALL SOURCES/ MULTIPLE RESPONSE	NOTE: DO NOT RECORD RAIN AS A METHOD OF IRRIGATIONPOND

E: Public Distribution System and Outstanding Loans

E01	What type of PDS/Ration card does your household possess?	APL CARD1 BPL CARD2 ANTYODAYA/BBPL CARD3 APPLIED BUT NOT RECEIVED4 NOT APPLIED5 NONE6)4
E02	Do you avail ration from PDS?	YES, REGULARLY1 E0 YES, SOMETIMES2 NO3)4
E03	What are the reasons for not (regularly) availing PDS ration? (ASK FOR ALL REASONS/ MULTIPLE RESPONSE POSSIBLE)	NOT INTERESTEDA POOR QUALITY OF GRAINB NO PDS SHOP/IRREGULARC SHOP TOO FARD HAVE APL CARDE NO MONEY DURING PDS SUPPLYF USE OWN FARM PRODUCE PARTLYG OTHER I	

Loans

E04	Does any member of your family have outstanding loan from bank, cooperatives, SHGs, money lenders, friends, relatives, and so on?	YES1 NO2 -	▶ F01
-----	---	---------------	-------

E05: Details of loans outstanding

MID	Name of borrower	Source of credit	Month & year of loan		Interest rate % per year	Assets mortgaged	Purpose of loan
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

Col (1) & (2) MID & Name: RECORD AS PER TABLE B02

Col (3) Credit source: 1 Bank, 2 Money lender, 3 Trader/Employer, 4 NGO 5 Relative/Friends, 6 SHG, 7 Co-operative Society, 8 Other (specify)

Col (7) Asset mortgaged: 0 None, 1 Own land/house deed, 2 Others land/house deed, 3 Own jewels, 4 Others jewels 5 Own durable goods, 6 Others durable goods 7 Personal security, 8 Deposit 9 Other (specify)

Col (8) Purpose of Loan: **01** Farming activity; **02** Petty trade/business; **03** Medical expenses, **04** Education, **05** Marriage expenses, **06** Family function/ceremonies/festival, **07** House construction/purchase/repair, **08** Purchase of land, **09** Purchase of Jewelry, **10** Purchase of durable goods, **11** To buy animals, **12** Settle/pay another loan, **13** Family consumption, **14** Pregnancy/child birth related expenses, **15** Death related expenses, **16** Other (specify). (RECORD UP TO 3 IN ORDER OF IMPORTANCE)

F: Major problems in the village

F01: What, according to you, are the major problems faced or needs to be addressed in the village at the village level? (PROBE & ELABORATE POSSIBLE SOLUTIONS ACCORDING TO THE RESPONDENT)

1.	
2.	
_	