



A Report On

Need Assessment to start a Health Vertical.

(PARIVARTAN)



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1. Introduction

Mr. Norpline Kerketta and Mr. Amber Tanwar, a student of Tata Institute of Social Sciences, were placed in *Parivartan, Bihar* as a part of Block placement for 1 month to understand the rural economy and wide range of social, economic and political issues with Gender and Caste perspectives as Bihar is one of the ground of Caste practice which the literature says. Along with that most importantly, contribute to the Organisation in whichever area they need. So our report here will primarily focus on issues and findings related to Health as we have chosen to do '*Health Needs Assesement for Health Vertical*'.

The study is to conducted in Jiradai block of Siwan District, Bihar. Siwan district has 16 Panchayats. As per the 2001 census Jiradai block has a population size of 1,63,941.

We were given options to work in various verticals viz. Education, Mahila Samakhya and Agriculture, the intervention they already had in the organisation while there was No Health Vertical. Options were given as per our interest. So we had orientation in the first week about the organisation and the verticals they were working and to understand the problems and to know in which area we need or feel to contribute. Our interest developed in doing Health Needs Assesement as from the sources and field visits in the first week, we found that the health status of the people living in the area is abysmal having interaction with the people from Santhu and Narendrapur village. Various problems regarding basic sanitary facilities, open defecation and lack of treatment for minor ailments was mentioned quite often by the villagers here need to be a detailed study on health as far as their sanitary facilities, treatment procedure and mass open defecation is concerned. Status of various social assistance programs of the government as well as from Panchayat were also asked, whether they (the villagers) are benefited by these policies or not and to understand the impact on the people.

From the first hand observation we also found that there are separate settlements called 'tola' for different caste groups and people no doubt dependent on agriculture for their livelihood but their work also differs. Say the MNREGA work is done by the low caste groups but the upper caste did not work in menial jobs.

So as per that, questions were framed to have an holistic picture and understanding of various communities. Various lens were adopted to understand the social structure of the villages to get in depth idea and the functioning of village among different caste groups. So to understand the various stakeholders related to health, it became our target to visit these institutions and to know their functioning despite their presence their condition are still in such bad state.

The Report will solely based on interaction and visit to various stakeholders and Institutions and on the key health issues identified out of it which is highlighted below.

A. Public Health profile of the villages with major challenges.
B. Government intervention through various schemes (Health and other related development programs) and public outlook towards those programs.
C. Role of various stakeholders <ul style="list-style-type: none">• Primary Health Center/ Additional Primary Health Center• Private medical practitioners• ASHA/ANM workers• Traditional Healers.• Quacks
D. Observation and Findings: Key health issues. <ul style="list-style-type: none">• Sanitation and Hygiene• Open Defecation• Out of Pocket Expenditure on Health• Consumption Basket - Nutrition Intake of different communities

2. Health Profile:

Major diseases identified from various groups(Men, Women, Infant and Children).

Fig.1

Groups/Categories	Disease
Men	Typhoid, Diabetes
Women	Typhoid, Anemia
Infant	Pneumonia
Children (6-14)	Cold-Cough, Fever(seasonal change), Typhoid

The above diseases highlighted are the most prevalent in the area. Apart from that no cases/sickness were identified. As per our observation and findings other diseases/sickness were minor ailments and the major disease prevalent was Typhoid.

The ailments such as Pnuenomia is being taken care by the ASHA workers which seemed to be common among the small childrens but well taken care of. Cold. Cough and seasonal fever which seemed to be a common ailment throughhout the villages, people said that by going to private clinics or from the Quack doctors they used to get medecines costing around Rs.200 -500 per sickness.

When asked about the reason about Typhoid many said that they didnt get fresh water, the water they had to consume turns red whenever they keep in pot. Few said that diseases are prevalent everywhere.

The incident speaks some of their view on the causes of sickness and they didn't acknowledge that the water they consume might be the causes of the diseases they face.

Indicating water as a cause of many diseases, post that when my friend took bottle of water to drink after asking why do you think the causes of the diseases might be?

One man replied saying, “Ap log bottle, bisleri ka pani pee rahe ho, ap logon ka bimari nahi hota kya”.

So they are most of them unaware about the open defecation and water as the major cause of Typhoid.

3.Out of Pocket Expenditure: In order to understand the Health status of the people, its important to know how much a family spends on Health of his total expenditure. It also indicates the priority which a family gives on Health to know the quality of life of the people. From the above ailments identified in Fig.1 , Typhoid seemed to be the major disease in the area with highest expenditure on Health. It covered Transportation cost till Siwan Town as there are no Hospitals nearby equipped to treat Typhoid. They said that minimum expenditure for Typhoid was not less Rs.15,000 and extended till Rs.20,000. For other minor ailments such as Cold-cough, Seasonal fever costed around Rs.200-300. The approximate cost most of the families had to bear a cost was around 500-1000 excluding the Typhoid per month. Hiring of a private vehicle to go to a hospital in Siwan Town is also a major burden on the people. It costs around Rs. 800-1100 to make a round trip from village to Siwan Town and back.

4. Social Determinants leading to spread of Typhoid.

Countries with less access to clean water and washing facilities typically have a higher number of Typhoid cases. Typhoid is spread by contact and ingestion of infected human feces. This can happen through an infected water source or when handling food. Water pollution is a major concern in Bihar and Iron is a common contaminant. Statistics say that 31 blocks from 20 districts have got Iron in groundwater and the highest Iron concentration is found in Jeradai block(14mg/l) in Siwan District

In 2001, the per capita water availability in cu. M was 1950 and 1816 for Bihar and India respectively. It further declined to 1545 and 1200(cu. M) in 2011. It is said that excessive dependence of ground water in Irrifgation due to uncontrolled growth and uncontrolled deforestation became the cause of decline in water level. So tas a result water quality is deteriorating and affecting th ehealth of the people. Groundwater remains the main source of drinking water and it constitutes 80% of the drinking

water. Earlier it was considered safe but but in recent years there has been report on contamination and pollution problems affecting the people¹.

As seen from our field experience, open defecation and poor hygiene are the primary cause of spread of Typhoid bacteria in the villages. Little or no importance is given to Sanitation and Hygiene as everyone in the village defecates in the open and it has been normalized and has become a practice to go out in the fields or on the roads for 1:30-2 hours daily. Even the people who have toilets in their homes go out to defecate and they use the toilets at home for emergencies only, like at night or when there is rain, otherwise everyone prefers to go out in the fields.

Generally, men go out in the day time and women go out after sunset. Through our Focus Group Discussions (FGD's) and interviews, we found that more than 90% of the population that goes in the field for defecation do not use soap afterwards. They simply rub their hands with mud and come back home. This practice would lead to transfer of the Typhoid Bacteria.

Patriarchy also plays a role in further worsening the situation as women are even told not to carry water for after-wash by the men. On one particular instance, when we were interviewing a group of men, they told us that women don't carry water for cleanup as it is "embarrassing" for a woman to clean in the open and that the women are not equal to men in every way and hence can't carry water.

5. Measures which can be taken to eliminate Open Defecation:

"Cleanliness is next to Godliness" is a universal phrase used to specify the importance of being hygienic. It is said that open defecation is the mother of all infection and morbidity and there has been evidence that the water sanitation and hygiene is one of the important

¹https://www.researchgate.net/publication/281865761_Groundwater_Arsenic_Contamination_in_Bihar_Causes_Issues_and_Challenges [accessed Sep 30, 2017].

cause for child linear growth. And these 'open defecation' is a national concern as it has around 600 million practicing in the world².

The biggest problem of Swachh Bharat Mission, not being successful is that it has been used for constructing Toilets but not been able to promote its use which is quite evident in Bihar as we have observed. It has to be community led approach and this can be possible only when community is so much sensitized of the ill effects of Open Defecation that they bring about a behavioral change in them. Defecating in the open spreads diseases and bad atmosphere and by making them understand the importance of hygiene, they will start using it. Because it is a fact that using of Toilet has never been embedded as a cultural practice in the rural villages. So for these, PARIVARTAN can take a step in making the national program a success.

As many people from the field said that the government has merely provided Latrines without promoting the use of it will simply not work in the area.

6.Possible Intervention by PARIVARTAN

- PARIVARTAN can conduct awareness and clean-up campaigns in the villages. And conduct hygiene lessons to elevate the importance of proper sanitation.
- The organization can also conduct an educational drive on hoe to improve their health through the practice of hand washing with soap.
- It is important to make the villagers realize how open defecation can lead to transfer of the Typhoid bacteria and hence building of and use of toilets should be encouraged.
- The awareness drive will also involve the preventive measures that can be taken to avoid Typhoid like washing hands with soap, avoid drinking untreated water,

[2http://pubmedcentralcanada.ca/pmcc/articles/PMC5020240/](http://pubmedcentralcanada.ca/pmcc/articles/PMC5020240/)

avoid raw fruits and vegetables and peel fruits yourself (do not eat the peel), not to have ice in drinks.

- Form a women's SHG/Committee to empower women, where there general issues will be discussed e.g hygiene, cleanliness, other social issues and the committee will also provide training if necessary. The training will also make them able to advocate their rights. Making such a committee is very difficult in a patriarchal setup but it is the best way to address women's issues. In this committee, the composition can be of influential members of the community, most vulnerable sections of the community, ANM workers, ASHA workers, ICDS workers.

Fast Facts on Typhoid

Some people are capable of carrying the bacteria without developing typhoid symptoms.

- (a) The only treatment of Typhoid is Antibiotics.
- (b) If untreated, Typhoid kills around 25% of infected individuals.
- (c) Typhoid fever regularly reach 104 degrees Fahrenheit.

7. Caste Based Consumption Pattern:

Less Nutrition intake in food consumed leads to malnutrition and since maternal and child health remains the important indicator of improved health if properly taken so it is very important to know the dietary practice. Besides that in these report Caste factor is used to understand that consumption on caste lines is needed to be analyzed since people from different caste groups have a different tasks they perform. So as per that it is very necessary to know since the consumption should also depend on the body requirements as not all are engaged on hard work doing manual labor. In India, there needs to be consumed a total of 2400 calories while a person living in Urban should consume food amounting to 2100 calories. By looking at the consumption

pattern given in *Fig.2* it doesn't show that their intake will reach 2400 calories for Gonds, Chamar, Kumhar, Pashwhan and Ravidas who especially do manual work more than the Yadavs, Bhumihar, Brahmins & Rajputs who seemed to be the dominant castes in the villages.

First of all, we need to know that the main food crops across all the villages is wheat, Rice and Maize and that becomes their primary consumption. But however there is a mode as to how their consumption varies across different caste groups reflecting their ability to consume. There has been almost same type of food consumed by some categories so it is put together. The Table given below will clearly show the difference and the diet different communities have which we commonly got to know.

Fig.2

Caste groups	Yadavs, Bhumihar, Brahmins & Rajputs	Gonds, Chamar, Kumhar, Pashwhan, Ravidas
Breakfast(Regular food)	Rice/wheat with milk/ghee and Leafy/other seasonal vegetables	Roti with one leafy vegetable or if not with Tea
Lunch	Rice/wheat with Dal and leafy vegetables.	Left over Roti with Dal and sometimes leafy vegetables. (Rarely Dal and leafy vegetables, mostly 1 item, either Dal and Leafy seasonal vegetable)
Dinner	Rice/wheat with ghee/ butter, other leafy or seasonal vegetables.	Roti/Rice with mostly 1 vegetable if not with Dal.

Further, from the above figures we can understand that Yadavs, Bhumihar, Brahmins & Rajputs are having relatively better food contents/better nutritious than the Gonds, Chamar, Kumhar, Pashwhan and Ravidas. To understand why it is happening we

found that the milk is sold usually by the latter castes for income and also that they used to have less cattle than the former caste groups. And seeing the nutritional requirement the latter castes are engaged always on work, be it in agriculture and in off season, they do works of pottery (kumhars), carpentry and other manual tasks so they needed better nutritional requirement but they fail to consume.

8. Child Nutrition and Functioning of Anganwadi Centers (ICDS)

Anganwadi centers of Dharampur, Santhu and Khiyam Bhatkan were visited to know their functioning as far as their resources equipped related to food and basic amenities are concerned. Also most importantly to figure out the number of malnourished children in the area. In Dharampur, out of 55 children's of 0-3 years, 4 are malnourished and for them the Anganwadi worker gives guidance as to the consumption of nutritious items which she/he should have to improve their health. Additionally the malnourished children get a total of 4kg of Rice and 2.5kg of Dal and Soybeans unlike the healthy children who gets half of what the undernourished children gets. Along with that de-worming tablets are given to the children. The intake of 40 children is fixed in the center those who come to study and play. But when there are more children in the age groups, they are also invited.

The menu of food remained the same across centers. It is tabled down below:

Mon	Khichdi - Rice, Dal, Leafy vegetable, Oil, Spices
Tue	Pulao - Rice, Groundnut, Chana, Seasonal Vegetable, Onion and Oil
Wed	Khichdi - same as above
Thu	Halwa - Suji, Groundnut, Sugar
Fri	Rasia - Rice, Groundnut, Jaggery
Sat	Khichdi - same as above

8.1. Observations and Findings

It depends on the funds they get as the Anganwadi worker of Dharampur said that there has been no guarantee that funds will come every month and says that in the year 2016 she got funds for only 6 months, sometimes having a gap of 1 and 2 months and that in these gap period the children don't get food and the teacher don't get remunerated. The reason behind this is that the money allocated for in some months Anganwadi Centers are not released on time and the gap period varies every time. In some months they get around Rs. 15,000 and around Rs.13,000. And from these amount the teacher has to manage the food and take the salary. When funds are adequate, seasonal fruits, biscuits and bhujia are given at the time of breakfast.

Regarding the basic sanitary facilities, none of the centers had a functioning Toilet and the children were openly urinating around the center and just 1 out of three center had Hand pump installed.

In Santhu center, there has been no record of height and weight check such that the status of the children in regard to nourishment can be found. For the entire year 2016-17 it was not undertaken. But when asked about how they identify undernourished children, she replied that if they don't take Rice and Dal adequately and don't play and jump around then he/she is a unhealthy child. And about the entry of height-weight she replied that she will be entering the monthly weight from Jan 2017 with an idea by measuring the current height and weight which is not working if we try to know the improvement with respect to their height and weight. And they didn't have the machine to know the degree of malnutrition and only the Anganwadi center of Dharampur said that she uses it.

8.2. Possible Interventions by PARIVARTAN :Malnutrition - Maternal and child under-nutrition have a life long impact on the health and effects the future generations. India being one of the fastest developing nations has one of the worst records of malnutrition.

Maternal Health - India has almost one fifth of maternal deaths globally and there is a clear link between underdevelopment, poverty and maternal health.

- It is extremely necessary to make the Anganwadi workers realize the importance of their work. By properly feeding a child, they are not only making a child healthy and building his/her future but they are also contributing in making the community/village strong and healthy which would ultimately lead to nation building. Therefore their work is at both the Micro and Macro level.
- The ICDS system needs to be strengthened up by making the ICDS workers have a sense of ownership that *its her children* and that they are the sole caretakers of the health of the children and the village.
- The Mothers and the Anganwadi workers should be made aware of the ill effects of malnutrition and how it can impact the health and development of the child in the short and long run. They also must be given one or two sessions on their right to the food. They should be made to realize that the food is their right and not a charity, and whenever there is shortage or no food available, they should raise their voices in village panchayats, BDO office etc.
- Bring girl's health into focus. Most pregnant women in middle and low income countries don't have a proper access to nutrition. As a result, their children start their lives already malnourished. If we prioritize the health of women and girls, we can boost general nutrition, reduce pregnancy complications and boost fetal growth and development.

9.Stakeholder Analysis: The Village Profiling is done to understand about the sanitary facilities, the village possess, the works they do to know the nutritional requirement needed to know across castes and to know whether there are ASHA's, Anganwadi centers and schools in the village as they are the stakeholders in spreading awareness about health of the people and so their role and people's perception will be done with Stakeholder Analysis

STAKEHOLDER ANALYSIS

Stakeholders	Role	Problems	Reach	Satisfaction(L M H)	Influence(L M H)
PHC/APHC	-Delivery patients -Benefits	-Focus on delivery patients alone. -Lack of space/Hygiene/Resource -Lack of Ambulance service -Lack of Doctors	-Only to Delivery patients	M	M
ASHA	-Ensuring all benefits to mothers right from pregnancy. -Till the child reach 6 years of age. -Ensure the child is on Anganwadi center and receiving the nutritional requirements.	-Incentive based work.	-Reaching to all Pregnant women.	H	H
ANM	Train ASHA workers and ensure that they do their work in co-ordination with Anganwadi workers.	-Timely meetings -Can't ensure regularity of funds and so food items. -Proper sanitation -Health and Nutrition education	-ASHA's and Anganwadi workers and Pregnant women	M	M

Traditional Mother	Delivery	Competition with ASHA's -Can't give government benefits	-Rich, Poor come to Her(All caste groups) -No maternal death still.	H	H
Private clinic	Dealing in seasonal fever, cold and other minor ailments.	-Few clinics and specialists. -Not equipped to deal with major ailments eg. Typhoid/Accidents/ Snake Bites	-People suffering from minor ailments like seasonal fever.	M	M
Quacks	-Reaching to the people with simple medications for cold, cough, fever(seasonal)	-Not specialized/Trained. -Risk in getting treated.	-Minor ailments	M	M
Anganwadi	-Food distribution for pregnant mothers, new born baby till upto 06 years. -Classes for 3-6 yrs of children.	-Lack of sanitary facilities -Irregularity of Funds -Attendance, nutritional status not taken into account properly.	-Every villages.	M	M

Analysis: The PHC/APHC could treat only delivery patient's with no proper infrastructure to keep many patients, thus can't ensure the time for OPD. For other diseases they used to refer to Sadar Hospital in Siwan. Only 1 Ambulance(not working) was there in the area. People have to manage by their own for reaching Hospital. The ANM say sthat there is no water facilities in PHC and so in the APHC there were no infrastructure with no much Doctors so it's impossible to handle so many patients. Further the Accountant says about the hygienme that if people stays here for long time, they will fall sick.The ASHA and ANM's have to work much to ensure that all the facilities to reach to the benefeciaries(mothers,children of the age

group 0-6 years) and the well functioning of Anganwadi centers. As the Anganwadi workers say that they don't get timely funds. Further they have much complaint on sanitation issues as the children have to do their needs in open.ue to lack of reach to all th patients and not equipped to treat the patients the Quachk Doctors are on a rise associating a risk are they are not trained. But interestingly people are making them treat them as they have a reach on them all as they move from one village to another.

10.Problems and challenges of the PHC/APHC's

From the Accountant of PHC/APHC we got to learn that there have been huge human resource constraint as also of the infrastructural facilities as far as the centre's equipment in dealing varied patients are concerned.



(PHC,Ziradei-from Inside)

- He said that there have been only 3 MBBS doctors in the area and there are around 166000 people in the area and there were just 5 private doctors. Due to less man power the center cannot run 24*7.
- Again no dresser is available in the center. The center's surrounding was so unhygienic that even the Accountant of the center was forced to say that people coming in the center may fall sick after coming here.
- With our observation we got to find that there were only 2 beds for delivery patients and that one also quite attached in a small room. And because of that they can't even admit the new patient's as they can't give full time for the patients.
- Infrastructural facilities was a severe problem, APHC even had a water crisis. And lack of space became the major problem so for OPD time has to be shifted and adjusted accordingly and emergency issues had a full time.
- As per the new rules and guidelines, a community Health center (CHC) requires 20 bed and to convert it into CHC, there requires 20 bed so with the space and land problems they can't give to convert into as a result they are failing to get the infrastructural facilities.

Since there is a huge lag in availability of doctors there has been a rise of Quack doctors (they are trained for few months or have got experience) and they are numbering around 17 in the area. They visit every villages weekly and check whether there are any patients and they used to provide first aid services, and carry medicine's

for fever, head ache and other body pains, cold, viral fever which has been a prevalent disease in the area.

11. Role of ASHA and the ANM

ANM(Auxiliary Nurse Midwife) is the first contact person between the community and the health services. They help in achieving national level health programs. And the ASHA (Accredited Social Health Activist) workers works under ANM. They are the community health worker. There used to be generally 3 or 4 ASHA workers under each ANM. With the Anganwadi worker, the ANM works as a resource person to train the ASHA's and have a weekly review meeting with them. ASHA's are guided by ANM on health care.

The ANM does immunization sessions of children's brought by ASHA's. And the ANM further does check-up of pregnant women

For every ANM there were 3 ASHA workers under them. ANMs used to train the ASHA workers to take care of the pregnant women and help them to have a well facilitated delivery and ensure that they get access to the food items and advice. And the ASHA workers used to have a direct contact with the women and let the food and other items reach through Aaganwadi worker and at the end report to the ANM.

12.Understanding the Societal Structure of the Villages

The social component is an important feature to understand the causal and explanation to various health problems in rural village where caste system is practised which has become the root problems affecting public health. For instance, societal norms doesn't allow women to take water for cleaning after defecation despite the fact that open defecation is amajor concern.Say, Women have to go out at night and early morning before sun rises sommehow finding a leisure time interacting with each other. These is because of work burden and because of donminance and prevalence of patriarchy that women are not allowed to go outside from home at day time. These can be clearly understood from one incident.

When we went to visit the *Ward member of Dharampur*, to get information about her role, we found that she din't come out from home even if the weather was so hot and outside there was a shade under the tree. To add her mother-in-law was sick and had

vomited but still we had to interact with her there. When asked why she is not coming out she responded saying “Ghar ke bahar jata nahi mein”. So we understood from these that if a Ward member can't come out from her home at day time even for work how can she come out to defecate in the open as 90% of the women used to open defecate.

So there is no chances of women coming out from their home and they have to spend their entire day at home.

Such is the life of women and women say that they face hardship if they feel like excreting at day time because it is a matter of shame going out in front of the males eyes which resulted in stomach pain.

13 Benefits from Various Developmental Schemes

As the developmental schemes provided by the government helps in improving the quality of life and in development of the family, if properly distributed. It was necessary to know about the benefits the people are getting touching the sanitation and other health related condition viz. Swachh Bharat Abhiyan, MGNREGA and PDS to understand the nutritional intake if possible.

Further interacted with the Block Development Officer of the Jiradai Block and got informed about the various schemes which prevails in the area. The schemes were 1. Atal Pension Yojana (APY) which comprised of Widow, Old age and for Handicapped. 2. Swachh Bharat Abhiyan 3. Indira Awas Yojana 4. MGNREGA and the Public Distribution System. All of these is taken into account to know whether people has got benefited with these schemes.

Swachh Bharat Abhiyan: It is a campaign by the GOI to keep the roads, streets in towns and Rural areas clean . These campaign was officially launched in the year on 2nd october, 2014. The Government aims to make India Open-Defecation Free (ODF) by 2nd October 2019 constructing 12 million toilets in Rural India.

The objective of the Swachh Bharat are to eradicate open defecation through construction of individual and community toilets.

The key issue which will be dealt on is Open defecation as it has been one of the major health issue as far as hygiene of the area is concerned.

As per our observation we found that there is mass open defecation and hardly no usage of Toilet in these area. From the words from the people we can understand wether '**Swachh Bharat**' has become an utter failure.

Say, one women from Narayanpur said that her name is taken three times for Toilet but she has not got. What people see in its failure is that they want that their Toilet be constructed and should be more than 2-3 feet deep and they say that if they get the fund they will construct by adding their money. But the Rozgar Gram Sewak(RGS) and other MGNREGA officials also fear that if they give the money and if the Toilet is not built, than the whole risk of it goes to the Panchayat officials.In regard to not using of Toilets even from women from rich households, they say that they don't use the toilet but prefer to go for open defecation and all the reason was given that they go for an hangout and that already behavior is framed and it is hard to change their behavior.And that the Rozgar Gram Sewak(RGS)said that they don't say about usage of Toilet and open defecation afraid that the womens may get offended.And that only people those who have got housing under IAY or are under the list in the BLOCK are eligible for Toilet and those who have already got Toilet as given in the list are not considered anymore.

And that when survey is done by the Panchayat all the households are not covered and do as per their convenience. For conducting a survey ACCC survey is used which is a very faulty and not authentic as far as inclusion of all is concerned.

Indira Awas Yojana(In context of Toilet): It is a flagship programme created by Government of India to provide housing for rural poor in India.Under that scheme people get assistance of Rs 1,20,000 in rural areas and Rs. 12,000 for constructing Toilets.Before they were allocated some Rs.70,000 in plain areas and Rs.75,000 in high land area.

In Narayanpur they have got just around 5 households. In Bharaoli only around 30-40 households have Toilet out of 600 plus households.

MGNREGA:It is a social security measure that gives a guarantee of 'right to work'. Every adult member will get 100 days for work in one financial year and the MGNREGA is mainly implemented by Gram Panchayats.

From the Gram Rozgar Sewak we got to know that the works under MGNREGA undertaken in the area are viz. Digging ponds, earth filling, constructing roads, plantations, construction of embankments etc.

Basically MGNREGA's objective is to block migrant workers such that they get minimum affordable wage in off season being engaged in work.

The caste groups like Rajputs, Bhumiya, Yadav and Brahmins don't do the work of MGNREGA. The reason may be that they don't want to mix with the lower castes and lose their prestige which they seem and assume to hold with respect to Harijans, Gonds and other lower caste groups.

Mentioning about the functioning of the **PDS(Public Distribution System)** in the area, In all of the villages the people say was the same. They even have a problem in getting ration card and they say that that they have to get a broker and pay some amount to get it done. And that they used to get ration of two to three times in an entire year which did not go for more than 5 months across villages.

So we can understand from the above schemes that their health condition can't be improved as significant number are untouched who were in real need of the benefits they required be it ration, toilet & sanitary facilities.

Conclusion

The Health issues because of open defecation and lack of sanitation and drinking facilities provided by the government has aggravated the problems of the people . None of the social assistance programmes of the government are delivering the required and beneficiaries out of it are very minimal which neglected large section of people and benefited only the few dominant castes.

Lack of Human resources and medical centers has led people to make people to waste huge amount amounting to Rs.3000 to get cured for diseases like Typhoid as

they have to hire vehicals in case of emergencies as even there is only 1 Ambulance in the area which only goes during accidents and get delivery patients, but even for it there is a poor maintenance. Required resources as supposed to be there in the PHC/APHC is not there. Say in Ziradei(PHC) there were only two beds for delivery patients and the Narendrapur even faced water shortage. No scissoring facilities are available due to lack of surgeons in the area.

Besides that most of the hand pumps which the family uses is not more than 50 feet deep which they say that the water gets red when they keep for some 2 hours. Such is the water they are consuming as a result water led diseases are evident in the area.

Open defecation remains the primary problem which needs to be eliminated by way of engaging community people by several awareness and interventions like as mentioned above such that the villagers stay hygienic in which **PARIVARTAN** has got a huge role to play.

Annexure 1

Jiradei Block

Total no. Of Panchayat	16
Primary Health sub-center	18
PHC	1
Anganwadi Centers	134
APHC	5
Primary school	62
Middle school	43
Higher school	6



FGD in Narayanpur

Total number of villages covered	04(Santhu, Narayanpur, Gonthi and Bharauli) Covered 3 panchayats
<u>Tools adopted</u>	1. FGD Guide: Various caste groups in the village 2. Interview schedule: ASHA/ANM/Accountant of PHC/BDO/RGS/

Traditional Mother

3. **PRA**-in village Sikia and Dharampur

Annexure II

Village Profiling



3. **Villages visited** : Gonthi, Bharauli, Santhu, Narayanpur

Vill: Santhu Panchayat:Chandauli Gangauli Panchayat

Number of Households:	Approx. 180
Primary Occupation:	Farming (mainly of Wheat and Paddy), Agricultural labor and labor work in Construction sector.
Caste based occupation:	All of them are engaged in agricultural activities, but the caste groups like Harijans, Chamaar are engaged in Bataidari system of cultivation as they have comparatively less or no land as

compared to Brahmins or other dominant castes. In off season, they go for construction work of houses in other villages/cities.	
Number of Temples:	01
Communities residing in the village:	Brahmin, Harijans(SC), Chamaar, Lohar.
Population: approx.	1500
Average number cattle in every house:	2
Community Hall:	0
Average land Holding per household:	1-3 Bigha (1 Bigha = 27 Katha, 1 Katha = 1,375 square feet)
Migration	Middle East
Primary school	01
Anganwadi Center	01
No. of ASHA workers	03

2. Village : Narayanpur Panchayat: Miya Ke Bhatkan

Number of Households:	Approx. 110.
Primary Occupation:	Farming (mainly of Wheat and Paddy), Labor work in Construction sector.
Caste based occupation: All of them are engaged in agricultural activities. But the caste groups like Kumhar do pottery. In off season, they go for construction work of houses in other villages/cities and do carpentry work.	
Number of Temples:	01
Communities residing in the village:	Gawala - Yadav(50), Srivastav(5), Rajbhar(5), Kumhar(45), Chaudhary. No Harijans in the village.
Average number cattle in every house:	02
Community Hall:	0
Average land Holding per household:	5 Katha (1 Bigha = 27 Katha, 1 Katha = 1,375 square feet)
Migration(Work)	Middle East for work (30-35men).

Primary school	01
Anganwadi Center	01
CPR (common property resources)	0
No. of ASHA workers	03
No. of Households with Toilets	20-25
Common primary school (till 5th std.) Narayanpur and Sikiya Village.	01

3.Village: Gonthi Panchayat: Miya Ke Bhatkan

Number of Households:	Approx. 359
Primary Occupation:	Farming (mainly of Wheat and Paddy), Agricultural labor and labor work in Construction sector.
Caste based occupation: All of them are engaged in agricultural activities. But the caste groups like Harijans, Chamaar are engaged in Bataidari system of cultivation as they have comparatively lesser or no land as compared to Brahmins or other dominant castes. In off season, they go for construction work of houses in other villages/cities.	
Number of Temples:	02
Functional no. of Govt. Toilets	0
Communities residing in the village:	Brahmin, Yadav, Rajput, Gond, Khuswaha, Harijans(SC).
Population:	approx. 2500
No. of Households with toilets	10% of the household.
No. Of Households with Solar Power	5%
Average number cattle in every house:	2-3
Community Hall	0
Average land Holding per household:	2-4 Bigha (1 Bigha = 27 Katha, 1 Katha =

	1,375 square feet). Harijans don't have any land.
Migration(work)	20% of Migration in the Middle East
Primary school	01
Anganwadi Center	02

4.Village: Bharauli, Panchayat:Miya Ke Bhatkan

Number of Households:	600 plus.
Primary Occupation:	Farming (mainly of Wheat and Paddy), Labor work in Construction sector.
Caste based occupation: All of them are engaged in agricultural activities. But the caste groups like Harijans, Chamaar are engaged in Bataidari system of cultivation as they have comparatively lesser or no land as compared to Brahmins or other dominant castes. In off season, they go for construction work of houses in other villages/cities.	
Number of Temples:	01
Communities residing in the village	Brahmin (Ojha/Dubey/Tiwari), Rajput - (Singh/Rai),Bhumihar, Gonds and Harijans(Pashwan, Rabidas,Chamar)
Population	Almost equal size of population among each communities.
Average number cattle in every house	02
Community Hall	0
Average land Holding per household	2bigha (1 Bigha = 27 Katha, 1 Katha = 1,375 square feet
Migration	Middle East
Primary school	01
Secondary school	01
Crematorium ground	Separate Crematorium for each caste groups.



(Santhu Anganwadi center, Unernoursihed child)

Annexure III

Malnourished children found in the three Anganwadi Centers.

Center	No of malnourished children	Age group	Degree of malnourishment
Dharampur	4	0-3 age	3(1st degree) 1(2 nd degree)
Santhu	1	3years	2 nd degree of malnutrition
Khyam bhatkan	1 handicapped	0-3age	1 st degree

Annexure IV

Services provided by the PHC/APHC in the Area



Primary Health Center, Ziradei

PHC's are the public health centers and they are state-owned government funded centers. Under them they have pregnancy and related care program as there has been an increase in neonatal deaths so pregnancy care has been a major focus. And all PHC's has to store emergency medical drugs. For e.g. Snake bites, Rabies and vaccinations.

To know it's functioning we have visited 1 APHC center of Jiradai Block and APHC of Narendrapur. In the PHC and in the area which these centers covers, they have only 1 ambulance which was also to be repaired.

Further we got to know that only during severe illness and accidents these ambulance services are provided and for other ailments they have to hire a vehicle.

Officials said that only delivery patients were given service as they were equipped only to deal with those delivery patients and the first aid services are provided by them and they act as referral to the institutions where their sickness can be cured where they basically referred to Siwan i.e at Sadar Hospital.

It has also been mentioned that although it was announced that the institutional delivered family will get Rs.6000 but minimum of Rs. 1400 is still continuing.

As we had also been interacting with the Driver, one very interesting incident happened. The driver was called by one man who came on the bike and asked him to go. We assumed that there are some medical emergencies but eventually got to know that he went to do some ritual/prayer services as the pandit/pujari of the area was not available at that time and so the driver turned to be a Pujari too.

Annexure V

Detailed Analysis of Typhoid

9. Typhoid

- Partly preventable by vaccine.
- Treatable by a medical professional.
- Spreads through contaminated food or water.
- Short-term: resolves within days to weeks.

What is Typhoid?

Typhoid is an infection caused by the bacteria *Salmonella Typhimurium*. The bacteria lives in the intestines and bloodstreams of humans. It is spread between individuals by direct contact with the feces of an infected person. Typhoid fever is contracted by drinking or eating the bacteria in contaminated food or water. No animals carry this disease, so transmission is always human to human. If untreated, around 1 in 4 cases of typhoid end in death. If treatment is given, less than 4 in 100 cases are fatal. *S. Typhi* enters through the mouth and spends 1-3 weeks in the intestine. After this time, it makes its way through the intestinal wall and into the bloodstream. From the bloodstream, it spreads into other tissues and organs. The immune system of the host can do little to fight back because *S. typhi* can live within the host's cells, safe from the immune system³.

Diagnosis: Typhoid is diagnosed by detecting the presence of *S. typhi* via blood, stool, urine or bone marrow sample.

Symptoms of Typhoid

1. Symptoms normally begin 6-30 after exposure to the bacteria. The two major symptoms of typhoid are fever and rash

³<http://www.webmd.com/a-to-z-guides/typhoid-fever#1>

1. Typhoid fever is particularly high, gradually increasing over several days up to 104 degrees Fahrenheit.
2. The rash, which does not affect every patient, consists of rose-colored spots, particularly on the neck and abdomen.
3. Other symptoms can include weakness, abdominal pain, constipation and headaches; rarely, symptoms might include confusion, diarrhea and vomiting.
4. In serious, untreated cases, the bowel can become perforated; this can lead to peritonitis (an infection of the tissue that lines the inside of the abdomen), which can be very serious⁴.

Typhoid Vaccination

There are two kinds of Typhoid vaccines available: Oral and Shot

Oral - live, attenuated vaccine.

Consists of 4 tablets - one taken every other day.

Shot - inactivated vaccine.

Vaccines are not 100 percent effective and caution should still be exercised when eating and drinking. Vaccination should not be started if the individual is currently ill or if they are under 6 years of age. Anyone with HIV should not take the live, oral dose.

Even when the symptoms of Typhoid have passed, it is still possible to be carrying the bacteria. As a result, it is difficult to entirely stamp out the disease because carriers whose symptoms have finished may stop showing caution when washing food or interacting with others.

Although there are two types of typhoid vaccine available, a more powerful vaccine is still needed. The live, oral version of the vaccine is the strongest of the two; after 3

⁴<http://www.webmd.com/a-to-z-guides/typhoid-fever#1>

years, it still protects individuals from infection 73 percent of the time. However, this vaccine has more side effects.

The current vaccines are not always effective, and because typhoid is so prevalent in poorer countries, more research needs to be done to find better ways of preventing its spread⁵.

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[1.http://pubmedcentralcanada.ca/pmcc/articles/PMC5020240/](http://pubmedcentralcanada.ca/pmcc/articles/PMC5020240/)

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