

Need Assessment

Comprehensive Need
Assessment at
Mathurapurapur-II &
Patharpratima Block
of South 24 Parganas



Conducted by



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Consultancy Services Group
October 2016



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List of abbreviations

ASHA	Accredited Social Health Activist
BDO	Block Development Officer
BMOH	Block Medical Officer of Health
CDC	Community Delivery Centre
CD Block	Community Development Block
FGD	Focus Group Discussion
GP	Gram Panchayat
HH	House holds
HDI	Human Development Index
IAY	Indira Awas Yojana
ICDS	Integrated Child Development Services
IFAD	International Fund for Agricultural Development
IWMP	Integrated Watershed Management Programme
PHC	Primary Health Centre
PMAY	Pradhan Mantri Awas Yojana
RCH	Reproductive and Child Health
RMP	Rural Medical Practitioner
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
SC	Scheduled Cast
SSA	Sarva Shiksha Abhiyan
SHG	Self Help Groups
SSI	Semi Structured Interview
ST	Scheduled Tribe

Executive Summary

A comprehensive need assessment has been carried out in four Gram Panchayats under Mathurapur-II and Patharpratima block of South 24 Parganas districts in order to find out the needs in the communities and thereby develop sustainable, meaningful interventions for the development of these areas. Though Sabuj Sangha has been working in the area for long time but it was pertinent to understand how the community views its own problems and needs.

Assessment area

The need assessment was carried out in four Gram Panchayats under Mathurapur-II & Patharpratima block of South 24 Parganas district. The four Gram Panchayats are

Block	Gram Panchayat
Mathurapur-II	Nandakumarpur
Patharpratima	Achintyanagar
	Herambagopalpur
	Lakshmijanardanpur

Objective of Need assessment

The Need assessment was carried out with the following objectives:

- Understanding the needs and preferences of the community in the identified areas of Mathurapur-II & Patharpratima block.
- Identify the possible area of intervention.

Methodology

The need assessment was done by qualitative research methodology for systematic consultation with community focusing on different target groups like women, youth, adolescent girls, senior citizens and farmers and various stakeholders to understand the existing issues and needs in various domain like Health, Education, Infrastructure, Livelihoods and obtain their opinion and preferences on possible intervention points. The study team used a combination of qualitative and quantitative toolkits (household survey) to collect primary data directly from target groups and stakeholders.

Point of assessment

The assessment was focused on understanding the problems and issues of the community across diversified target groups i.e. community, farmers, adolescent girls, youth, senior citizen, SHG and cooperative members on the following **Points of assessment**

- Health and nutrition
- Education
- Livelihoods
- Water and sanitation
- Basic Infrastructure – road, electricity, transport
- Disaster risk
- Social issues

Key findings

The need assessment was focused on understanding the needs and preferences of the community in the identified areas.

Health & Nutrition

RCH and general health care

Lack of health infrastructure and access to basic healthcare services has emerged as one of the major concern in all villages under four Gram Panchayats. Most of the villages have poor connectivity and transportation facilities to avail health care services from PHC and Sub-centres. The current focus on Reproductive and Child Health program, all Sub centres and PHCs are mostly concerned about institutional delivery and immunisation but it is just opposite in case of general health care services in the area. As a result, many illnesses go untreated and reliance on unlicensed medical practitioners is very high. The household survey result shows that 45% families availed services from RMP on regular basis.

Low birth weight

There is considerable number of babies born with low birth weight. 20% (14 out of 70) babies born with low birth weight during July-September, 2016 at Herambagopalpur CDC, Whereas low birth weight rate was higher (26%) at Swarnalata Sabuj Seva Sadan in Nandakuamrpur. As per the health workers, medical officers early marriage, delivering child before 19 years of age, low weight of pregnant mothers are the major reason for low birth weight.

Health issues related to Senior Citizen and Adolescents Girls

Most of the senior citizens have eyesight problem and there is no service available in the nearby areas for check-up and cataract and other surgical facilities. People in the area access eye care services from Dayarampur eye hospital run by Sundarban Social Development Centre which is 60 km far from the area. The household survey results indicate that more than 90% of families having senior citizen (31% of total surveyed families) suffer from eye related problems.

Adolescent girls face huge health and hygiene related challenges. Majority of adolescent girls and mothers of adolescent girls use cloth during menstruation. Girls are forced to stay at home and miss school. In many cases, parents stop sending their girls to school. Unhygienic practices during menstruation also cause infections. Social prohibitions and negative attitude of parents in discussing the related issues has blocked the access of adolescent girls to right kind of information. Most of the adolescent reuse the cloth after washing it, and proper drying is a major concern. Adolescent girls still hesitate to share their problems with Medical Officers for guidance and consultation and even with their mother.

Nutrition

Malnutrition is a real challenge in the assessment areas. According to the BMOH, Madhabnagar Rural Hospital, malnutrition is the major challenge in Patharpratima block, which has highest

number of malnourished children in the district. The household survey analysis shows that 27% of the illegible children do not go to ICDS.

Education

The SSA program has helped to increase the enrolment but quality of education and retention is the major area of concern for the parents. Poor teaching quality and fewer teachers in the school are the major concern. The household survey indicates that 93% families having children illegible for school, send their children to Govt. school and only 7% families send their children to private school. As Govt. school is the only option for the families, they do not have any choices for private school. The household survey and FGD both indicates considerable drop-out rate within the age of 14 years. The rate is high among students passed secondary examination as most of them migrate to other state for job.

A significant portion of the parents shared their dissatisfaction on quality of education in Govt. schools. Besides classroom education, parents also expect school to give more emphasis on cultural, extracurricular activities and computer literacy to their children and overall a better learning environment.

Livelihoods

Agriculture & Fisheries

Agriculture is the major sources of livelihoods but it is at subsistence level. Aman paddy is the dominant crop, 80% of net cultivable area is under rain fed Kharif (aman) paddy with low yield. Lack of irrigation is the major constraint for increasing the cropping intensity. In Rabi season the agricultural activities focus more on dry farming and less water consuming crops, pulses like Khesari & Moong and Oil seeds by using stored water in ponds and canals. The household survey analysis shows that the cropping intensity is lowest in Achintyanagar GP where only 33% families grow second crops with the water from ponds and canals. In Lakshmijanardanpur GP, number of farmers (about 80% of farmers) grows potato but mostly for their own consumption. Due to lack of proper storage, almost 50% of the production gets wastage every year.

In Purba sripatinagar village in Achintyanagar GP, nearly 60% of cultivable land remains fallow for 4-5 months after Aman paddy harvest. Change in monsoonal pattern due to probable climate change adversely affected the agrarian economy of the village. Impacts of climate change especially the extreme events and sea level rise adversely affected the low lying areas and the coast line villages of the GP by intrusion of saline water. These are the most vulnerable area and under serious threat.

Fishery operation and fish catching in rivers and sea are the second major occupation of the inhabitants in this area, particularly in the riverside villages

Livelihoods of resource poor vulnerable community

There are considerable number of households, mostly belonging to scheduled tribe community who do not have agricultural land and also live near or on the river embankment. They are the most vulnerable community and are engaged in fisheries, fish catching, crab catching, honey collection and wild shrimp seed collection. The household survey analysis shows that 34% of families do not have agricultural land and mostly depends on wage labour.

Unskilled labour & unsafe migration

As this is a mono-cropping area, people mostly depend on rain fed Kharif crop, the scope of generating additional employment to the emerging work force is very limited. A major portion of work force (more than 40%) migrates to nearby districts and other states in search of a gainful employment. This forced migration puts families at risk, as they settle in temporary living conditions in unsafe environments. Children are particularly at risk, and find themselves victims of child labour and trafficking. Youth group are majority in numbers which includes both boys and girls, mostly school drop-outs, class VIII to XII and work as unskilled labour as helper for construction works, carpentry, plastic factory, car wash station, small offices etc. Girls and married women mostly migrate to Delhi as domestic worker. Interaction with youth group indicates that they start working with very low wages (Rs, 350 to 500 per day) as they work as unskilled labour and the working conditions are very unsafe and unhealthy

It would be helpful for them if they get any training on masonry, carpentry, welding, fitting (plumbing work) etc., so that they can get semi skilled jobs instead of working as a labour.

Water and sanitation

Availability of safe drinking water is the major issue for the villagers. Villages which are not connected with piped water supply prefer to travel longer to get safe drinking water during peak summer. Piped water supply is available in few areas but the coverage areas are getting reduced day by day. Numbers of functional hand pumps available in all villages are less than the requirement. The drinking water crisis reaches its peak during the summer period, when most of the hand pump (around 40%) does not work and people had to travel 1-2 km. Pond water is also used for household purpose, mainly for washing utensil and even washing and cooking of rice and during rainy season this is a major threat for water borne diseases. The household survey analysis shows that 38% of the surveyed families use pond water for household, mostly for washing and cooking rice. The household survey results also indicate that 20% of families filter or boil water before drinking but mostly for the children.

The Swachh Bharat Abhiyan has really put the sanitation issues in the forefront of development agendas at the block administration and panchayat level. But still there are gaps in terms of uses of toilets, particularly with those families who constructed the toilets with single pit few years back and now need renovation. The household survey analysis indicates that 15% families still practice open defecation.

Basic Infrastructure – Road, electricity, transport and housing

A significant area under four gram panchayats lack the basic infrastructure i.e. road, electricity, transport facilities. Poor road condition and absence of transportation facilities have been identified as a major bottleneck for accessing the health services and other facilities like market. Most of the villages are not electrified. Main source of illumination is therefore solar and kerosene lamps. The household survey analysis show that 42% households do not have electric connection, only 31% of the households have solar panel installed on the roof. Most of the houses are non-permanent kutchha type and thatched houses made of local materials (straw), which is very vulnerable to strong wind. Most of the villagers submitted application for Indira Awas Yojana (IAY) but very few of them (less than 10%) received the grant from Panchayat in last year. The household survey results show that 62% of the families have kutchha house.

Disaster Risk Reduction

Patharpratima Block is very much prone to cyclonic storm that originate from the low-pressure zone of Bay-of Bengal. As this is surrounded by rivers and sea, the earthen embankments encircling the island areas are mostly vulnerable to the upsurge & flash flood especially during high tide synchronized with the high velocity wind. The disaster risk is very high in Achintyanagar Gram Panchayat which is situated within a cluster of three Gram Panchayats viz Herambagopalpu, Lakshmijanardanpur & Achintyanagar which is completely isolated from the main land. The villages are protected by the earthen dykes which are mostly vulnerable to natural disasters like cyclonic storm induced flash flood, land erosion, tidal surge and breach of embankments, etc.

Social issues

Early marriage has been identified as a major concern area in all the Gram Panchayats. The major challenge is that though this issue has been discussed in various forums like Panchayat meeting, SHG but it has not been recorded at meeting resolution for taking any concrete action.

Need and preferences

The analysis of key findings mentioned above and the village level problems analysis in household survey has been consolidated to identify the major needs in the assessment area. The problems analysis revealed that most of the people have expressed their need for better road, quality educational support, electricity, safe drinking water, healthcare services (including eye care) and livelihood support.

Road access: This is the preferred need expressed almost in all villages.

Healthcare services: Healthcare services at the remote villages & specialist doctors at Swarnalata Sabuj Seva Sadan in Nandakuamrpur.

Eye care services: Low cost eye screening, examination and treatment facilities, cataract and other surgical incidents, free medical camps & checkups.

Safe drinking water: More number of hand pumps, but deep tube well is preferred.

Educational support: Adequate and proper coaching and guidance to students with extracurricular activities.

Electricity: Electric connection and continuous power supply.

Livelihoods: Irrigation facilities for land holding families and livelihood diversifications for resource less households.

Recommendation

Triangulation of results from FGD, Household Survey and Stakeholders consultation revealed different needs of interventions & support for overall development of community. However access to general healthcare and eye care services, safe drinking water and electricity are the most preferred need expressed in FGD and household survey. The stakeholders' consultation also aligned to the observation made in FGD and Household survey. The second level priorities are irrigation and educational support. However stakeholders also suggested the needs of addressing malnutrition, early marriage and sanitation.

Based on the above analysis and feasibility of intervention and making a visible impact within different timeframe following recommendations have been made.

Short term initiatives

Drinking water: Intervention to ensure the availability of drinking water. Clean and sufficient drinking water are needed and deep tube well may be the better option. But feasibility should be checked.

Eye care services: Establishing low cost eye screening, examination and treatment facilities, cataract and other surgical incidents, free medical camps & checkups. The existing infrastructure at Nandakumarpur can be used for developing an Eye Health Care Centre.

Irrigation facilities through renovation: At Purba Sripatinagar the sluice gate can be renovated for fresh water conservation in the canal. It will restrict the saline water intrusion into the canal and more than 300 acres of land can be used for second crop.

Renewable energy – solar: Establishing community based solar mini grid and set up of institutional mechanism for running the grid and maintenance.

Medium term initiatives

Access to general healthcare services: Regular health camp at the remote locations (clustering villages) with mobile clinic facilities.

Ensuring quality education: Establishing model schools at the remote areas. Providing education support to underprivileged children through learning centre.

Vocational training of youth: Establishing a vocational training centre for youth. Training of youth on identified trade (as per interest area of youth). This will help the youth either initiating their own enterprise or they can migrate with some skills.

River bank protection: Demonstrate vegetative river bank protection by plantation in a scientific way. A combination of multi-purpose & different type of grasses may be planted on the country side river bank whereas a combination of different mangrove species may be planted at the different slope on the river side.

Storage/marketing facility: Establishing small cold storage, particularly for potato and market facilitation centre and transportation for bakery unit set up by the Sundarban Mahila Cooperative.

Housing & Road: Facilitation support with Panchayat for prioritising the vulnerable families. Support for house building for extremely vulnerable families. Consultation with panchayat and block administration for better road and connectivity.

Long term initiatives

Water and sanitation: Awareness on the use of filter and boiled water, particularly during rainy season. Formation of water users group to ensure maintenance and sustainability. Awareness on use of toilets to ensure 100% free from open defecation.

Adolescent health & hygiene practice: Improvement in knowledge and practices regarding reproductive health and with special emphasis on hygiene during menstruation. Awareness and counselling among parents regarding adolescence phase and support required.

Mother & child care: Awareness and motivation of all mothers & family members in the areas where still home delivery occurs and people are less willing for vaccination. Awareness and counselling of young married couple for delayed pregnancy as evidence of low birth weight are there. Promotion of nutrition garden and regular follow up on food intake (pregnant & lactating mother and child) with the help of nutrition monitoring toolkits.

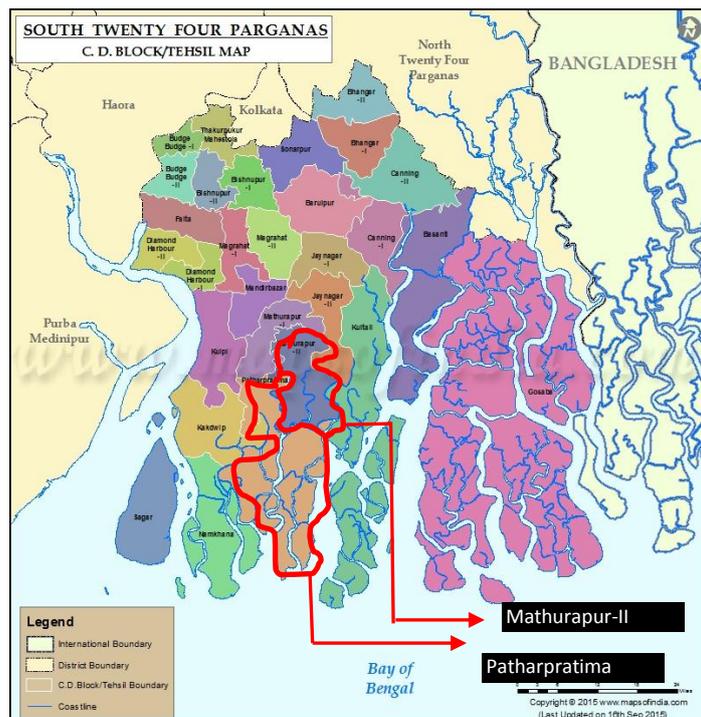
Disaster preparedness: Increased community preparedness and response to disaster with specific focus in schools. Developing and mainstreaming safety and contingency plan in school and community.

Livelihood diversification: Diversification of livelihoods through animal husbandry, poultry, fishery and other options are needed for vulnerable resource poor families, especially the ST.

Chapter-I: Context

Despite remarkable economic growth, poverty remains a major issue for India, with 41.6% of the population living on less than USD 1.25 per day. India has 33 per cent of the world’s poor people, and nutritional levels are unacceptably low, with 42.5% of children underweight, one of the highest rates globally. Despite consistent focus of poverty reduction programs, the improvement in the level of living might not have been distributed well and certain pockets of the country might have remained impoverished in spite of their overall growth. Planning Commission of India has classified all the districts in the country of which 200 districts are categorized as Backward. These districts in India are home to the most deprived communities comprising mostly of small marginal farmers and forest dwellers. In many of these districts poverty scenario continues to be acute despite consistent focus of several poverty reduction programs. The socio economic indicators of most of these districts are generally below the national average. South 24 Parganas in West Bengal is one of the backward districts among 200.

South 24 Parganas has the unique biosphere reserve of mangrove forests called Sundarban. The area outside the reserve forest (54 islands), home of about 8 million people spread over 29 administrative blocks, is the human face of the Sundarbans which epitomizes abject poverty, deprivation, and acute struggle against geographical challenges. It is however important to note that the geographical challenges vary across blocks. People, who live in the ‘remote’ - the blocks adjacent to the forest area or the Bay of Bengal – face much harder problems compared to those who live in the ‘peripheries’ (and closer to Kolkata). The blocks in the first group include Sagar, Kakdwip, Namkhana, Patharpratima, Mathurapur-I& II, Kultali, Gosaba, Canning-II and Basanti. The rest 19 blocks who are located closer to urban periphery – are benefitted in different degrees by the spread of basic amenities including roads and electricity. Due to harsh geographical challenges, the islanders struggle to survive on subsistence-level return from diminishing natural resources. Almost all of them depend on rain-fed / mono-crop agriculture, the forest (for forest products) and the rivers / estuaries (for fishing) which hardly provide adequate support to the households in terms of income and employment.



The distribution of landholdings is extremely fragmented. In all the blocks, even in the distant and almost completely rural blocks, more than 85 per cent of households are either landless or marginal farmers. This is not at all surprising, given the immense population pressure on land in absence of alternative livelihood opportunities.

Classification	Farm size range, ha	%
Marginal farmers	< 1	86
Small farmers	1 to 2	12
Medium to big farmers	>2	2
Total		100

The district has the third lowest cropping intensity in West Bengal. The blocks are close to the Bay of Bengal and being enclosed by rivers with saline water with very limited irrigation facilities. Thus, the area remains mostly a mono-cropped area making earning a proper livelihood from land more difficult. The scope for generating additional employment in land is also very limited unless the cropping intensity of the district changes significantly. It is interesting to note that yield rate of rice in South 24 Parganas has always been lower than that in the state.

Though South 24 Parganas is a middle ranked district ranked 8th in HDI in the state, there are substantial variations in human development across regions. Even within a single region, the levels of human development in different blocks are very different. Basanti, Patharpratima and Canning-II blocks have low HDI score, below 0.54 (District HDI score is 0.60). The district ranked 12th in terms of per capita income.

Name of the block	Poverty ratio (% of households)	Standard of living rank	Poverty rank
Basanti	64.89	29	29
Kulpi	52.64	23	28
Canning-II	50.32	28	27
Patharpratima	49.13	24	26
Mathurapur-II	39.56	22	21

The extent of poverty can also be gauged by the fact that a little less than half of the population (47%) belongs to the historically marginalized groups (such as scheduled castes and scheduled tribes).

Chapter-II: Objective and Methodology

Objective of need assessment

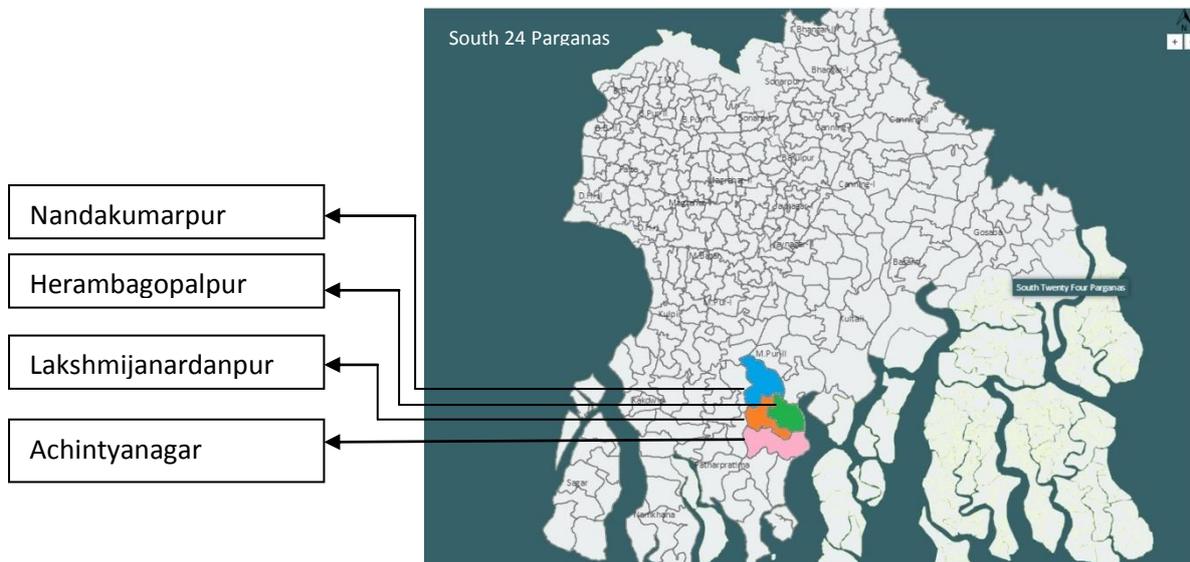
The need assessment was carried out with the following objectives:

- Understanding the needs and preferences of the community in the identified areas of Mathurapur-II & Patharpratima block.
- Identify the possible area of intervention.

Assessment Area

The need assessment was carried out in four Gram Panchayat under Mathurapur-II & Patharpratima block of South 24 Parganas district. The four Gram Panchayats are

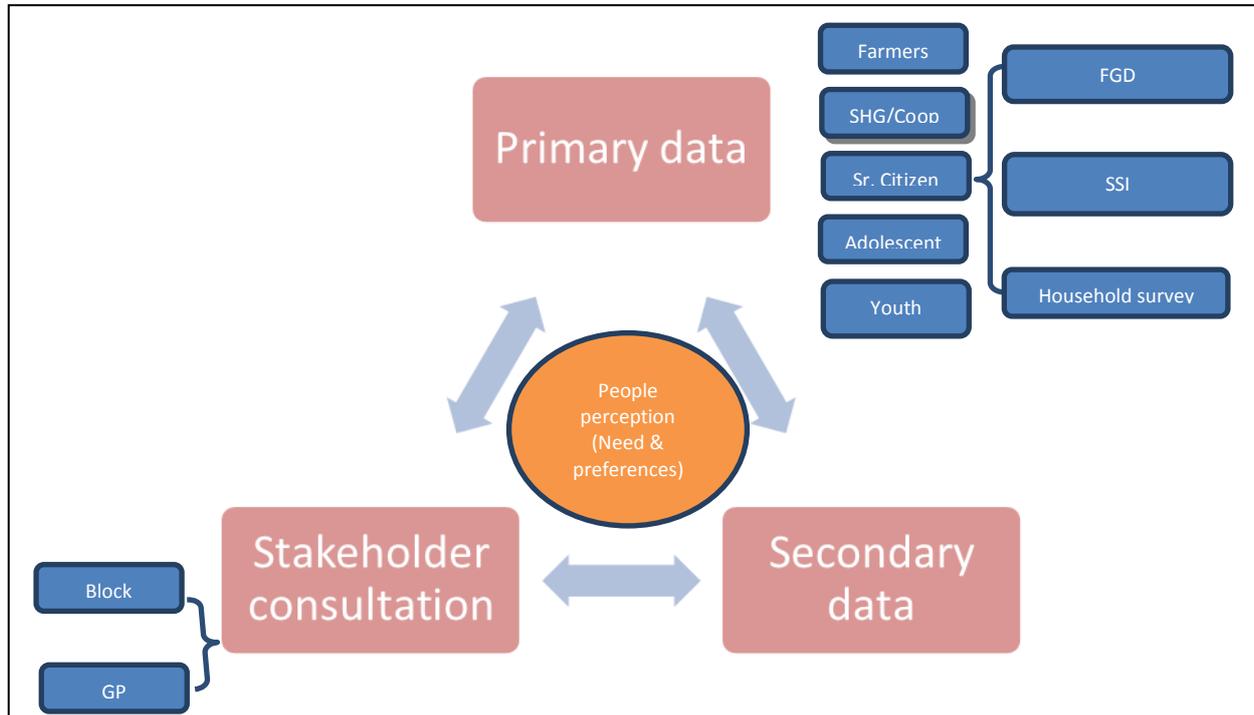
Block	Gram Panchayat
Mathurapur-II	Nandakumarpur
Patharpratima	Achintyanagar
	Herambagopalpur
	Lakshmijanardanpur



Methodology

The need assessment was done by qualitative research methodology for systematic consultation with community focusing on different target groups like women, youth, adolescent girls, senior citizens, farmers and various stakeholders to understand the existing issues and needs in various domains like Health, Education, Infrastructure, Livelihoods and obtain their opinion and preferences on possible intervention points. The study team used a combination of qualitative and quantitative toolkits to collect primary data directly from target groups and stakeholders. The Assessment was done through the following approaches.

- Contextual analysis –secondary data
- Household Survey
- Focus Group discussion
- Semi-structured interviews with stakeholders



The findings in the focus group discussion and semi structured interview are validated with quantitative analysis (from household survey) in the same context.

Point of assessment

The assessment was focused on understanding the problems and issues of the community across diversified target groups i.e. community, farmers, adolescent girls, youth, senior citizen, SHG and cooperative members on the following **Points of assessment**

- Health and nutrition
- Education
- Livelihoods
- Water and sanitation
- Basic Infrastructure – Road, electricity, transport
- Disaster risk
- Social issues

Household survey

A structured questionnaire was designed, tested and applied in the field to collect quantitative data on the status of the current socio-economic situation at the sample villages and communities views on the existing problems which need to be addressed.

Five villages were purposively selected to represent different socio economic context. The sampling was done on the basis of socio-economic profile of the villages within the Gram Panchayat. The following criteria were used as basis for selecting the villages:

- Community (SC/ST/Minority)
- Backwardness in terms of road, electricity, education and health facilities
- Remoteness of the village

Following villages were identified for the assessment.

Block	Gram Panchayat	Village
Mathurapur-II	Nandakumarpur	Nandakumarpur
		Mahabatnagar
Patharpratima	Achintyanagar	Purba Sripatinagar
	Lakshmijanardanpur	Maheshpur
	Herambagopalpur	Kuemuri

In total 135 respondents from four Gram Panchayats were surveyed. It was planned to survey respondents from the above villages which will validate the findings in focus group discussion with the same community. The data collection team was well trained on the survey questionnaire. Data was entered using Excel and analyzed.

Focus Group Discussions (FGD)

The team conducted eight focus group discussions at the selected villages with different target groups to identify issues and needs from various perspectives and to further investigate the issues in a qualitative in-depth manner. The FGD covered the same issues of the survey, more specifically:

Farmers' Group: Challenges and needs in agriculture/livelihoods
SHG/Cooperative members: Challenges and future plan, their role in addressing village and social problems
Sr. Citizen Group: Health and social security issues
Adolescent Group: Health issues and their aspiration mapping
Youth Group: Migration and aspiration mapping
Community group: development issues, vulnerability assessment, needs and preferences

Village	Focus Group	Participants	
		Male	Female
Nandakumarpur	SHG/Cooperative members		12
	Health workers		10
Maheshpur	Farmers Group	7	4
Kuemuri	Adolescent Group		13
Purba Sripatinagar	Community group	14	
	Sr. Citizen Group	7	
Mahabatnagar	Youth group	5	
	Community group	11	



FGD with Cooperative members at Nandakumarpur



FGD with adolescent girls at Kuemuri



FGD with community at Purba Sripatinagar



FGD with youth at Mahabatnagar

The SSIs was used for interviewing different stakeholders at Gram Panchayat and Block levels. The tool was flexible to accommodate diverse type of questions including development aspects and also specific to the area or theme in which stakeholder is engaged with. Following stakeholders have been interviewed during the assessment.

At Block Level	Stakeholders consulted
BDO – Mathurapur-II	Smt. Monalisa Tirkey
BDO – Patharpratima	Sri. Sakti Bara
BMOH-Madhavnagar (Patharpratima)	Dr. Krishnendu Roy
ADO-Mathurapur-II	Mr. Tanmoy Bhattacharya
BMOH Raidighi RH	Dr. Pranabesh Halder
BPHN Raidighi RH	Mrs. Moni Rani Pal
GP & Village level	
Pradhan -Nandakumarpur	Mr. Mujibar Rahman Khan
Pradhan -Herambagopalpur	Mr. Amrit Ranjan Giri
Panchayat –Lakshmijanardhanpur	Sri Purnendu Shekhar Kola (Health & Education) Mr. Uttam Kr. Dey (Agri & livestock)
Health Supervisor - Nandakumarpur	Smt. Ketaki Halder
ASHA workers- Kuemuri	Mrs. Sumitra Dasgiri Mrs. Anima Dasgiri
Head Master- Dr. B.C.Roy Memorial Vidyapith (Purba Sripatinagar)	Mr. Probhanjan Roy



SSI with Panchayat at Lakshmijanardanpur



SSI with ASHA workers at Kuemuri

Chapter-III: Socio-economic profile

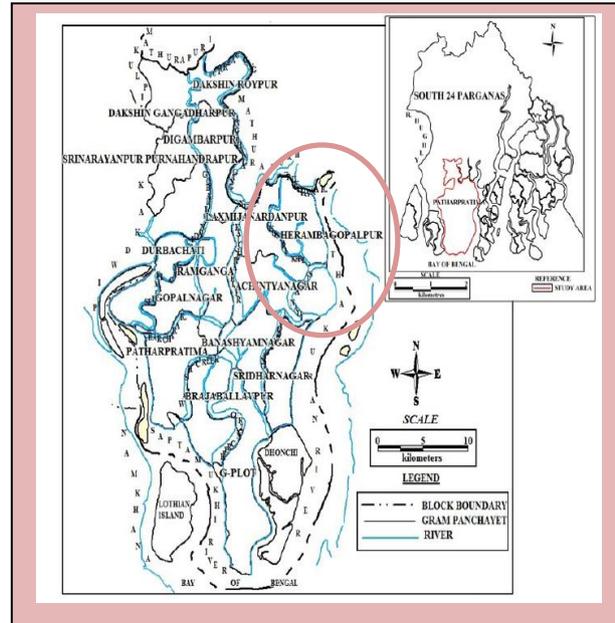
Patharpratima Block:

Patharpratima block is situated in the southern part of South 24 Parganas district. It is bound by Thakuran river in the east, Kakdwip and Namkhana blocks on the west, Mathurapur-I and II blocks on its north and Bay of Bengal in the South. This is one of the largest blocks of West Bengal consisting of 15 gram panchayats and 87 mouzas. It is entirely a rural area. The total area of this block is 484.47 square km. Agricultural area (Aman) is 32,679 ha. The major rivers are Thakuran, Mridangabhanga, Gobadia, Saptamukhi, Karjon Creek, Chaltadunia, Jagaddal, Bakchara, etc. The island villages are protected mostly by earthen dykes but some of the vulnerable portions and sea facing embankments are strengthened with brick-block pitching.

According to 2011 census the total population of this block is 3,31,823 and the density of population is 685 persons per sq. Km. Most people of this block adopted agriculture as their main occupation. Agricultural activity totally controls the socio-economic status of the people at this block. Patharpratima block situated in Sundarban Delta which is literally detached from the main land. This is one of the backward blocks out of 29 blocks in the district. The majority of the population belongs to scheduled cast and marginalized communities. Patharpratima ranked 23rd in HDI out of 29 blocks, which indicates the backwardness of the area. 30.66% of households are having no land for cultivation. 49.13% of the households are living below poverty line. Due to the remoteness of the area, interface between people and service delivery mechanism is minimal and people are not aware about different social safety net programs and schemes for poverty alleviation. Though Govt. has special focus on this area ensuring health, education, water and sanitation, Public Distribution System (PDS), it is beyond the reach of the extreme poor households. Only 7.04% households had electricity connection. 45.98 % households live in temporary house (as per census 2011).

Demographic details of the block:

Total Population	331823
#HH	69,641
SC	76163 (22.9%)
ST	2640 (0.8%)
Literacy rate	Total: 82% Male : 88.5% Female : 75.3%
Sex Ratio [M:F]	1000:958
Population density	684.9
Cultivators	24.07%
Agriculture labourer	49.1%
Non workers	57.5%



Source : census report 2011

The block often witness the cyclones & storm which normally occur in between May & December with the incidence being highest in May and the post – monsoon months of October & November. These cyclones normally bring high winds, heavy rainfall and strong tidal surge. These incidents damage the river embankments and made the adjacent villages inundated with saline water. During cyclonic storm Aila (2009) more than 40 km of river embankments got seriously damaged and the adjacent villages were inundated with sea water for days together. The villages alongside river are very much vulnerable to breach of embankments, land erosion and ingress of saline water. The threat of river and saline water intrusion is part of their life and it is the major problem of agriculture in almost all islands.

Patharpratima Block has a net cultivable area of 30,506 ha and according to 2011 census per capita land holding size is 0.092 ha. This holding size is decreasing gradually with the increase of population. Agriculture in this region depends on monsoon rains & basically monocrop.

GP wise demographic details:

GP	# of HH	Total population	Male	Female	SC	ST
Achintyanagar	5619	25845	13135	12710	7806 (30%)	22
Lakshmijanardanpur	4427	18900	9598	9302	3682 (19.5%)	401
Herambagopalpur	4700	22352	11475	10877	7124 (32%)	30
Total	14746	67097	34208	32889	18612	453

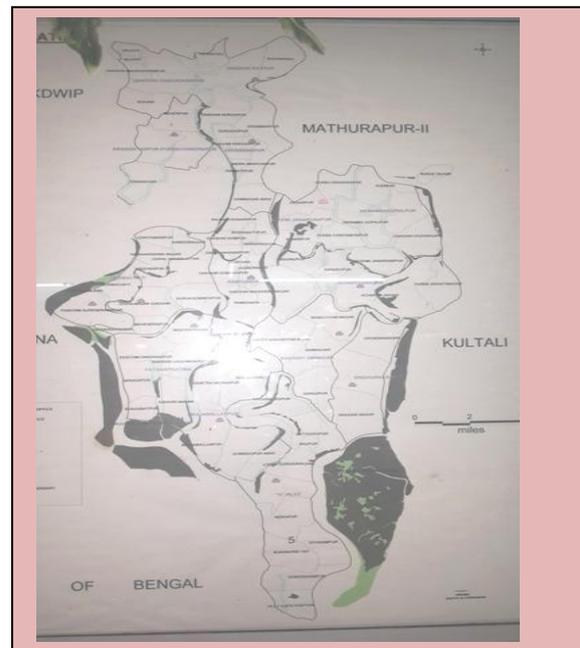
Mathurapur-II block

Mathurapur II CD Block is bound by Mathurapur I CD Block in the north and part of the west, Jaynagar II and Kultali CD Blocks in the east, Sundarbans forests in the south and Patharpratima in a part of the west. Mathurapur-II block has 11 Gram Panchayats. It is entirely a rural area. The total area of this block is 227.45 square km. According to 2011 census the total population of this block is 2,20,839 and the density of population is 971 persons per sq. Km. Mathurapur-II ranked 17th in HDI out of 29 blocks, but ranked 22nd in standard of living, 27th in infrastructure development which indicates the backwardness of the area. 51.70% of households are having no land for cultivation. 39.59% of the households are living below poverty line. Only 27.24% households had electricity connection. 53.29% households live in temporary house (as per census 2011).

Demographic details of the block:

Total Population	2,20,839
#HH	45,888
SC	62,342 (28.2%)
ST	4,643 (2.1%)
Literacy rate	Total: 77.7% Male : 85.09% Female : 69.9%
Sex Ratio [M:F]	1000:940
Population density	971
Cultivators	21.9%
Agriculture labourer	42.65%
Non workers	63.36%

Source : census report 2011



Demographic information of Nandakumarpur Gram Panchayat

There are eight villages and twenty three gram samsad in Nandakumarpur Grampanchayat.

Village	# of HH	Total Population	Male	Female	SC	ST	Minority HH
Narendrapur	339	1868	962	816	816 (44%)	0	0
Naranpur	416	2327	1209	1295	1295 (56%)	0	35 (8.4%)
Nandakumarpur	1092	5570	2828	1539	1539 (28%)	0	0
Mahabatnagar	808	4249	2158	496	496 (12%)	23	97 (12%)
Madhushudanchak	495	2603	1359	520	520 (20%)	0	0
Jagannathchak	326	1717	882	10	10 (1%)	0	0
Kailashpur	693	3532	1773	327	327 (9%)	0	0
Dakshin Joykrishnapur	1059	5204	2735	1743	1743 (33%)	7	0
Total	5228	27070	13906	13164	6747 (25%)	30	132

Chapter-IV: Key findings

The assessment was focused on understanding the situation and issues of the community across diversified target groups i.e. community, farmers, adolescent girls, youth, senior citizen, SHG and cooperative members on the following **Points of assessment**

- Health and nutrition
- Education
- Livelihoods
- Water and sanitation
- Basic Infrastructure – Road, electricity, transport
- Disaster risk
- Social issues

It has been emphasized to get community and primary target groups' views on the above mentioned assessment points through focus group discussion and validate with household survey results. The assessment also includes stakeholders' perspective on the above points and the report has been prepared by triangulation of information (Community views, Stakeholders views and Household survey analysis) from these three sources.

Health & Nutrition

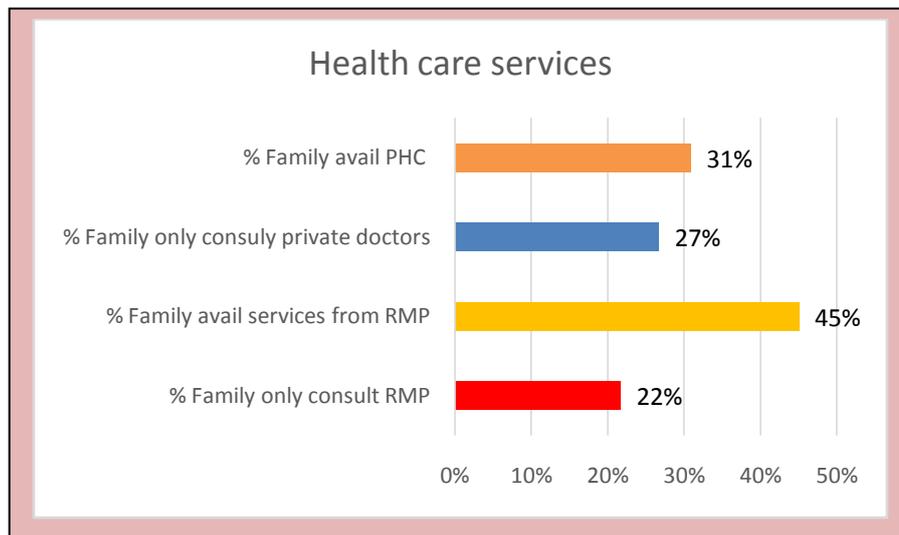
RCH and general health care

Lack of health infrastructure and access to basic healthcare services has emerged as one of the major concern in all villages under four Gram Panchayats. In Nandakumarpur GP under Mathurapur-II block, the nearest block PHC (Raidighi Rural Hospital) is at a distance of 10-15 km from most of the villages. In Nandakumarpur GP there are six sub-centres at different locations. But most of the villages have poor connectivity and transportation facilities to avail health care services from PHC and Sub-centres. The current focus on Reproductive and Child Health program, all Sub centres and PHCs are mostly concerned about institutional delivery and immunisation, with a considerable improvement (through introduction of ASHA workers, Janani Suraksha scheme, Ayushmati scheme and 24 Normal Delivery Centers) in achieving institutional delivery over 95% and similarly for age appropriate immunisation.

According to the Health Supervisor of Nandakumarpur sub-centre, there is considerable improvement in Institutional delivery and immunisation during last 2-3 years. There were only 2 home deliveries (out of 48) in last month (kailashpur & Nandakumarpur). There is lack of awareness and some resistance from few Muslim families for institutional delivery, on immunisation at Mallickpara in Naranpur. Women do not encourage their husband to go for NSV. Sub centre also lacks sufficient quantity of thermometers, stethoscopes and weighing machine. Health Supervisor also shared that the centre does not have Doppler ultrasound, which is a basic facility demand by most of the pregnant mother.

As per the Block Medical Officer of Health (BMOH), the Institutional delivery in last year in the district was 65%, whereas in Raidighi it was 80%, which is now 95%. In August there were 12 home deliveries out of 300 plus registration. Now it's their mission to achieve 100% institutional delivery.

But it is just opposite in case of general health care services in the area. One PHC for 2,20,839 block population is really inadequate. As a result, many illnesses go untreated and reliance on unlicensed medical practitioners is very high. Patients are rushed to the block level PHCs when they are in critical condition and further referred to sub-divisional hospital at Daimond Harbour which is more than 60 km from the villages. As per the health workers from local community (Sabuj Sangha- under Community health project) there are more than 60 Rural Medical Practitioners (RMP) in Nandakumarpur GP, which implies that for every 85 families there is a RPM available in the village.



The household survey result shows that 45% families availed services from RMP on regular basis, whereas only 31% families availed PHC for health care services.

Swarnalata Sabuj Seva Sadan (Rural Health & Training Centre), a 50 bed hospital at Nandakumarpur Gram Panchayat of Mathurapur II block with necessary basic facilities is the preferred choice for many villagers but due to poor road condition, people from all villages cannot access health services. It provides comprehensive health services to the people of rural communities of Mathurapur II and Patharpratima Blocks also other adjoining places of South 24 Pargnas district. It renders both indoor and outdoor services, diagnostic facilities i.e. pathological tests, X-Ray, ultrasound, and ECG and operation theatre services for various surgeries. Antenatal care, institutional delivery, postnatal care for women remains a key operational focus.

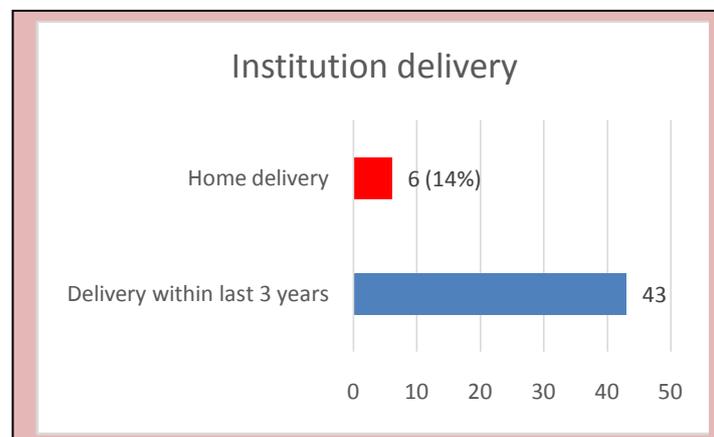


Swarnalata Sabuj Seva Sadan at Nandakumarpur

The situation in three Gram Panchayats (Achintyanagar, Lakshmijanardanpur, Herambagopalpur) under Patharpratima block is even worst as poor connectivity and remoteness of most of the villages. The variation in accessibility may be gauged by the time taken to reach the block PHC from the remotest village in the block. For example, it takes less than an hour to reach the BPHC from the villages which are well connected through road, while the minimum estimated time between the remotest village like Purba & Paschim Sripatinagar under Achityanagar GP is more than two and half hour as these villages are cut off by a river. It takes more than 3 hours to reach Raidighi PHC and more than 2 hours to reach Patharpratima block PHC at Madhavnagar by boat. Boat service is also not available all the time. From 9 am to 4 pm there is no boat service available; people need to hire special boat for any emergency. As per the FGD at Purba Sripatinagar, many people died in the last year without proper medical treatment.

As per the BMOH, Madhabnagar PHC, there is a significant improvement in institutional delivery & immunisation. In the month of September, the institution delivery rate was 96% and immunisation was 92%.

The presence of Swarnalata Sabuj Seva Sadan at Nandakumarpur and Community Delivery Centre at Herambagopalpur has significant contribution in institution delivery in the area. During July-September, 2016 101 pregnant women accessed these institutions for delivery of their child.



The analysis of household survey shows 14% home delivery.

Low birth weight

The information received from Herambagopalpur CDC and Swarnalata Sabuj Seva Sadan shows considerable number of babies born with low birth weight. 20% (14 out of 70) babies born with low birth weight during July-September, 2016. Whereas low birth weight rate was higher (26%) at Swarnalata Sabuj Seva Sadan. As per the health workers, medical officers early marriage, delivering child before 19 years of age, low weight of pregnant mothers are the major reason for low birth weight.

Health issues related to senior citizen and Adolescents Girls

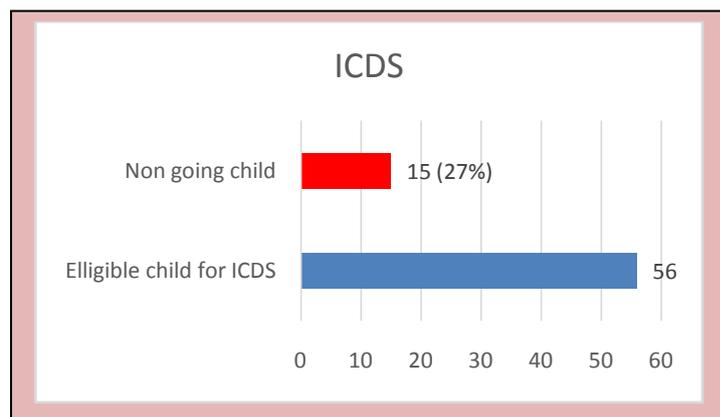
Interaction with senior citizen groups at Achityanagar revealed that almost all of them have eyesight problem and there is no service available in the nearby areas for check-up and cataract and other

surgical facilities. Though access to general health care services is a major concern, but people have option to take services from Rural Medical Practitioner (RMP) but services for eye care is almost nil. People in the area access eye care services from Dayarampur eye hospital run by Sundarban Social Development Centre which is 60 km far from the area. The household survey results indicate that more than 90% of families having senior citizen (31% of total surveyed families) suffer from eye related problems.

Adolescent girls face huge health and hygiene related challenges. Focus group discussion with Adolescent girls at Kuemuri, it is evident that adolescent girls were not aware about the menstruation till its onset and mother was the main source of information about menstruation. Majority of adolescent girls and mothers of adolescent girls were using cloth during menstruation. It is impossible for a girl to remain in school for long hours during her menstrual period without changing the cloth. As a result, often after a girl gets her menstruation, she is forced to stay at home and miss school. In many cases, parents stop sending their girls to school. Since girls are not properly educated about menstruation, it ends up causing fear, confusion, and anxiety. Unhygienic practices during menstruation also cause infections. Though the students residing in hostel uses sanitary napkin but disposal become a major challenge when they visit their home. Social prohibitions and negative attitude of parents in discussing the related issues has blocked the access of adolescent girls to right kind of information. There are many social taboos and restriction on food, bathing, visiting the temple/place of worship and mobility during this period. Most of the adolescent reuse the cloth after washing it where proper drying is a major concern. Adolescent girls still hesitate to share their problems with Medical Officers for guidance and consultation and even with their mother.

Nutrition

Interaction with various stakeholders; ASHA, Community health workers, BMOH and Panchayats reveals the severity of malnutrition in the assessment areas. According to the BMOH, Madhabnagar Rural Hospital malnutrition is the major challenges in Patharpratima block, which has highest number of malnourished children in the district. The FGD with Lakshmijanardhanpur Panchayat officials also indicate the malnutrition issues (reported 17 malnourished children in the last month's meeting) in the area. Panchayat members highlighted that pregnant women and children not attending the ICDS regularly. As per the BDO of Patharpratima block, the block administration has taken special initiative for proper implementation and strict monitoring of ICDS centres.



The household survey analysis shows that 27% of the illegible children do not go to ICDS.

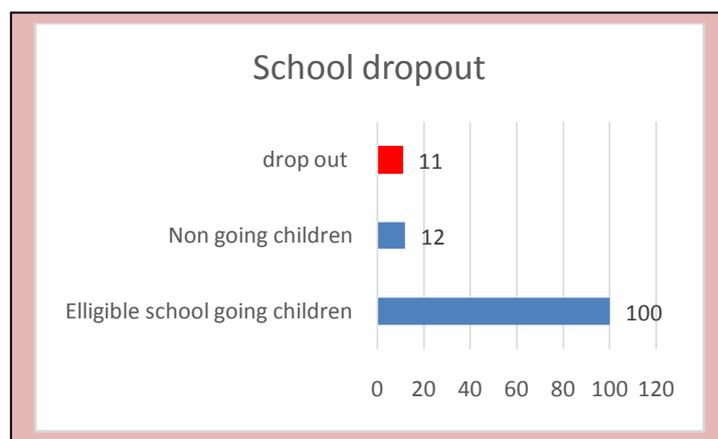
Education

The SSA program has helped to increase the enrolment and this has been well reflected in FGD and also in household survey. But quality of education and retention is the major area of concern for the parents. FGD with parents indicate that poor teaching quality and fewer teachers in the school are the major concern. As most of the parents could not continue their study (most of them are below 8th std.), they prioritise children education and all their aspirations are around child education. The household survey indicates that 93% families having children illegible for school, send their children to Govt. school and only 7% families send their children to private school. As Govt. school is the only option for the families, they do not have any choices for private school. The FGD with community at Purba Sripatinagar village under Achityanagar GP represents the worst case where there is only one teacher for 200 plus children and children are mostly go for mid-day meal. There is no place or facilities for recreational activities.

Families resides around Nandakumarpur village have access to private school 'KSSN' (a model school developed by Sabuj Sangha).

High school (Govt.)	4	3 schools are under construction
Primary school (Govt.)	16	
Private school	1	

The household survey and FGD both indicates considerable drop-out rate within the age of 14 years. The rate is high among students passed secondary examination as most of them migrate to other state for job.

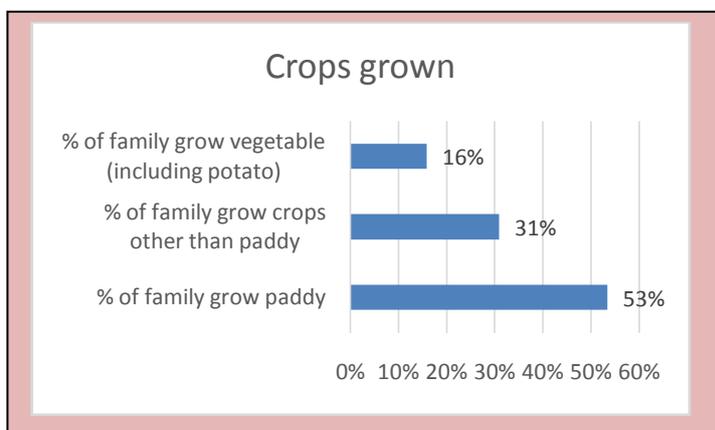


A significant portion of the parents shared their dissatisfaction on quality education in Govt, school. Besides classroom education, parents also expect school to give more emphasis on cultural, extracurricular activities and computer literacy to their children and overall a better learning environment.

Livelihoods

Agriculture & fishery

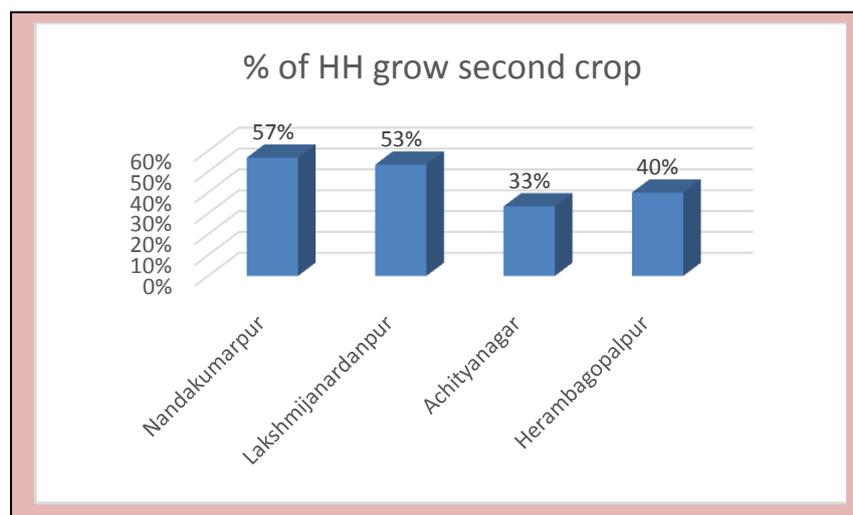
In the selected villages in Mathurapur-II & Patharpratima, agriculture is the major sources of livelihoods. But agriculture is at subsistence level. Aman paddy is the dominant crop and it is harvested during the period of post monsoon months in between November – December. As per the FGD with farmers group, 80% of net cultivable area is under rain-fed kharif (aman) paddy cultivation with low yield. Lack of irrigation is the major constraint for increasing the cropping intensity. Farmers in Nandakumarpur GP grow rabi paddy from bore well (shallow) but in other GPs in Patharpratima blocks very few farmers grow boro paddy cultivation with stored water from ponds and canals. In rabi season the agricultural activities focus more on dry farming and less water consuming crops like pulses like khesari & moong and oil seeds like til, mustard and sunflower. FGD at Maheshpur village under Lakshmijanardhanpur GP indicates that a considerable number of farmers (about 80% of farmers) grow potato but mostly for their own consumption. Farmers shared their concern of storage facility. Due to lack of proper storage, almost 50% of the production gets wastage every year.



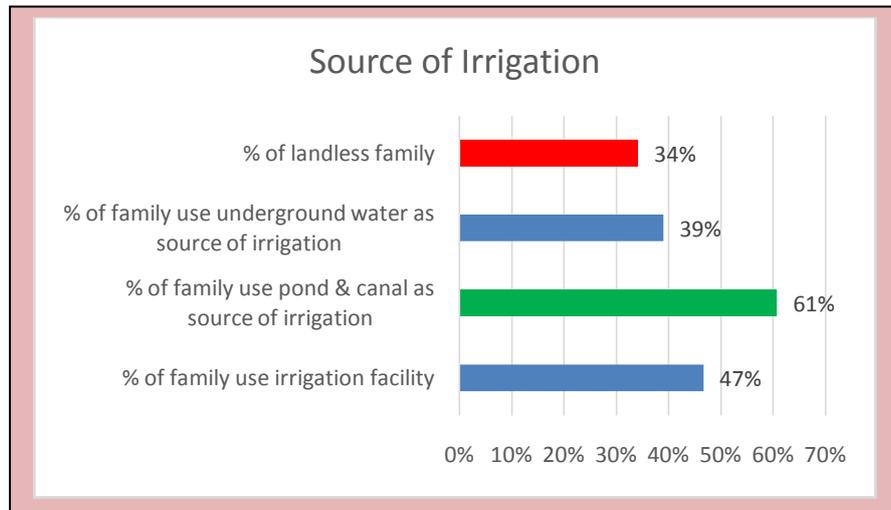
New crops:

Cotton: farmers in Herambagopalpur GP grow cotton with the guidance and marketing support from Nimpith KVK. Now Herambagopalpur is the cotton production hub in Patharpratima.

The household survey analysis shows that the cropping intensity is lowest in Achityanagar GP where only 33% families grow second crops with the water from ponds and canals.



The household survey analysis revealed that 47% of the family use either bore well or pond and canals for irrigation purpose, mostly for pulses & potato and small numbers of boro paddy. Ponds and canals are the major source of irrigation.



In Nandakumarpur GP, as the major portion of the land type is low, water stagnation in the fields is very high during kharif season. However regulated drainage structures (HP Sluices) drain out excess water to the rivers and save the standing crop from submergence. The Assistant Director of Agriculture, Mathurapur-II block informed that the agriculture department is going to implement the Integrated Watershed management Project (IWMP) exclusively at Nandakumarpur GP, which will take care of the issue of water stagnation, poor productivity and capacity building of farmers.

In Purba sripatinagar village in Achintyanagar GP, nearly 75% of cultivable land remains fallow for 6-7 months after Aman paddy harvest. Change in monsoonal pattern due to probable climate change may adversely affect the agrarian economy of the village. Impacts of climate change especially the extreme events and sea level rise adversely affect the low lying areas and the coast line villages of the GP by intrusion of saline water. These are the most vulnerable area and under serious threat. The major land type of this GP is low land (around 60% of net cultivable area). Farmers drew their village map during the FGD, where they mentioned that due to intrusion of salt water in the canal farmers could not grow winter crops. IFAD constructed a sluice gate almost 25 years back but it is not functional now.

Fishery operation and fish catching in rivers and sea are the second major occupation of the inhabitants in this area, particularly in the riverside villages. Close proximity to the sea and tidal rivers bring this opportunity to the people lacking gainful income all the year round. Even the cultivators & agri labourers are taking this occupation during lean season of agricultural operation for earning additional income in spite of natural & occupational hazards in this sector.

Livelihoods of resource poor vulnerable community

There are considerable number of households, mostly belonging to Scheduled Tribe community who do not have agricultural land and also live near or on the river embankment are the most vulnerable. Purba Dwarakapur and Lakshmijanardanpur under Lakshmijanardanpur GP has highest number of ST families. Most of the households are engaged in fisheries, fish catching, crab catching, honey collection and wild shrimp seed collection in the estuaries in the estuaries and Sundarban Reserve Forest areas. The household survey analysis shows that 34% of families do not have agricultural land and mostly depends on wage labour.

Unskilled labour & unsafe migration

As this is a mono-cropping area depending on rain fed Kharif crop, the scope of generating additional employment to the emerging work force is very limited. A portion of work force takes up high risk of sea fishing in the lean season. But a major portion of work force (more than 40%) migrates to nearby districts and other states in search of a gainful employment. People who migrate within the state mainly for working in the potato stores are seasonal migrants. But the most importantly out – migration of young people is increasing, as there is lack of local employment opportunities, which also disturbs the socio-economic structures of the villages. This forced migration puts families at risk, as they settle in temporary living conditions in unsafe environments. Children are particularly at risk, and find themselves victims of child labour and trafficking.

The FGD with youth group at Mahabatnagar revealed that at least one member from more than 50% of the households in the village have been migrated to other states. About 5% of the total households in the village, entire family have been migrated. As per the FGD at Purba Sripatinagar, the migration rate is quite high. At least one member from has been migrated from more than 75% families. More than 50 families have been migrated to Delhi (home locked). Youth group are majority in numbers which includes both boys and girls, mostly school drop-out, class VIII to XII and work as unskilled labour as helper for construction works, carpentry, plastic factory, car wash station, small offices etc. Girls and married women mostly migrate to Delhi as domestic worker. Interaction with youth group indicates that

- They start working with very low wages (Rs, 350 to 500 per day) as they work as an unskilled labour.
- The working conditions are very unsafe and unhealthy
- Migration of girls are very unsafe and risky

It would be helpful for them if they get any training on masonry, carpentry, welding, fitting (plumbing work) etc. so that they can start with semi skilled jobs instead of working as a labour.

SHG and credit cooperative

Sundarban Mahila credit co-operative society own and managed by women have more than 500 members and now going to complete their two years of operation. The General body members shared their plan to take this cooperative forward by not only providing financial services but also

diversifying economic activities for the cooperative and also for SHG members. Cooperative has started following economic activities in Nandakumarpur village.

Sundarban German bakery: Cooperative has established a state of the art bakery unit at Nandakumarpur. Women members look after the production and also marketing. Right now it has been only catering the localised market. The monthly turnover is around Rs.1 lakh. But still it needs to attend its break even and to attend the break even the bakery unit needs to increase the volume of production and also establishing the supply chain to cater the neighbouring markets.

Departmental stores: The cooperative has also opened one departmental store at Nandakumarpur village where all grocery related items are available at competitive price.

The members shared their challenges during the focus group discussion.

1. Cooperative cannot meet the increasing loan demand of SHGs.
2. It does not have its own office, now operates in a rented premise.
3. Though it has computerised MIS, there is less number of computers available to maintain the database and other records.
4. Members could not able to initiate new income generating activities individually, which would have helped them to save more.
5. Bakery and departmental store needs to earn profit to sustain the activities.

Water and sanitation

Availability of safe drinking water is the major issue for the villagers, villages which are not connected with piped water supply prefer to travel longer to get safe drinking water during peak summer. It has been well reflected in household survey, FGD with community and stakeholder's consultation.

Supply of water: Piped water supply is available in few areas in Nandakumarpur GP and Purba Chintamanipur village under Lakshmijanardanpur GP but the coverage areas are getting reduced day by day because of leakages due to poor quality of pipe and installation and sometime water gets contaminated.

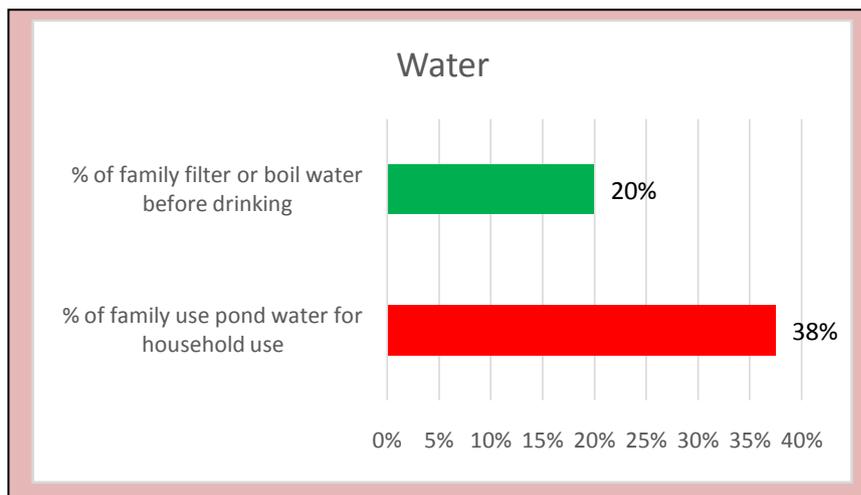


Water supply at Nandakumarpur village

Hand pump: Number of functional hand pumps available in all villages are less than the requirement. The drinking water crisis reaches its peak during the summer period, when most of the hand pump (around 40%) does not work and people had to travel 1-2 km (in few cases like Purba Sripatinagar, Maheshpur, Mahabatnagar etc). As per the Panchayat Pradhan of Herambagopalpur, it is not only the availability of drinking water but also the quality is a huge concern in his GP. The panchayat tested water from all 12 hand pumps and all the hand pumps have been identified as unsafe. But still it is not disclosed to the community.

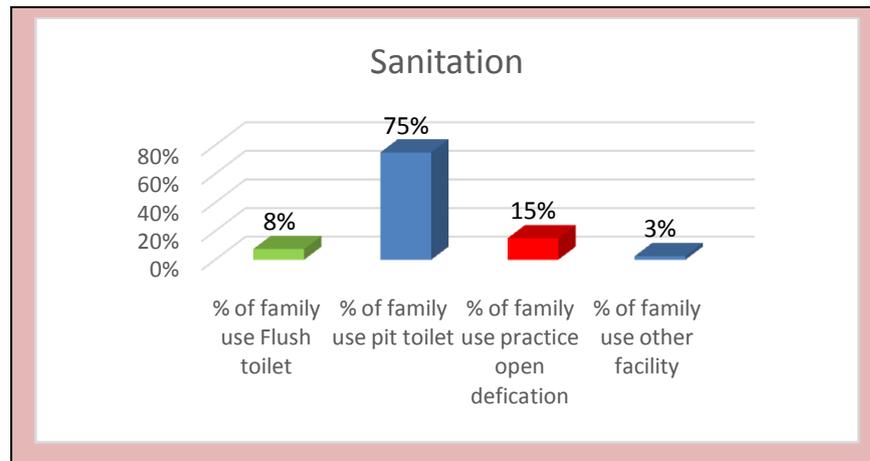
Pond water: Pond water is not only used for bathing purpose. It is also used for other household purpose such as washing utensil and even washing and cooking of rice. Though scarcity of water has been pointed out by the community for using pond water during summer but still many families uses pond water during rainy season which is a major threat for water borne diseases. As per the Panchayat Pradhan and also community health workers, diarrhoea often broke out in some villages. The community health worker pointed out that there are few families (around 10) at Jaikrishnapur who have suffering from diarrhoea for last one month and getting treated by RMPs. The household survey analysis shows that 38% of the surveyed families use pond water for household use, mostly for washing and cooking rice.

Use of boiling and filtered water: the household survey results indicate that 20% of families filter or boil water before drinking but mostly for the children.



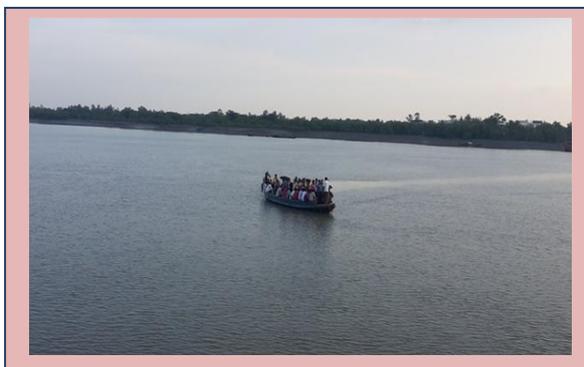
The Swachh Bharat Abhiyan has really put the sanitation issues in the forefront of development agendas in the block administration and panchayat level. In each panchayat lot of initiatives have been taken to cover 100% families under sanitation. As per the Nandakumarpur GP Pradhan, 80% families have toilet and remaining 20% will be constructed very soon. In the financial year 2016-17, panchayat has a target of constructing 1200 toilets under MGNREGA. But still there are gaps in terms of uses of toilets, particularly with those families who constructed the toilets with single pit few years back and now need renovation. Panchayat Pradhan of Lakshmijanardanpur shared that 60% families still do not have toilets. Many families have built their toilets using cloths, plastic with bamboo structure. As per the BMOH – Madhabnagar Rural hospitals open defecation is the major

problems at few villages, particularly at Gangadharpur GP. The household survey analysis indicates that 15% families still practice open defecation.



Basic Infrastructure – Road, electricity, transport and housing

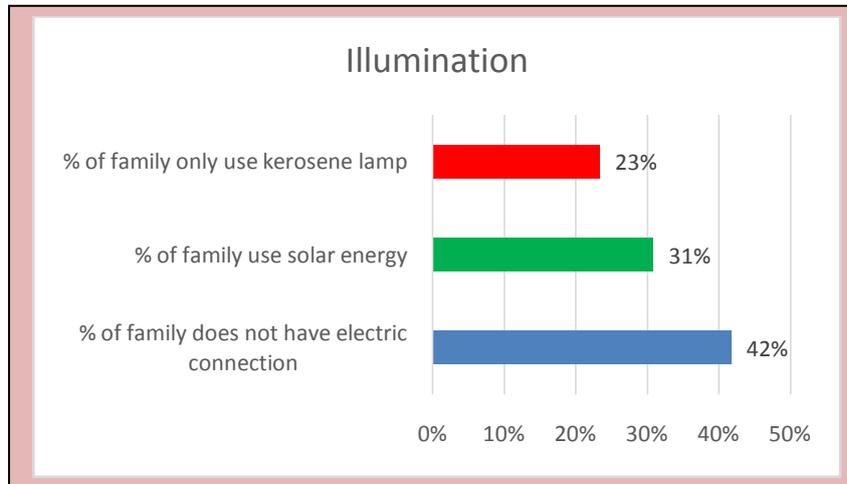
Road and transport: A significant area under four gram panchayats lack the basic infrastructure i.e. road, electricity, transport facilities. Though after aila in 2009, few villages have all weather roads having surfaced with brick pavements & concrete. But in the remote villages the approach roads are still kuchha and access to main road become almost nil during rainy season. Poor road condition and absence of transportation facilities have been identified as a major bottleneck for accessing the health services and other facilities like market. Being a remote block of the district, Patharpratima has been marked as an area having poor communication facilities not only in the island blocks but also in the blocks connected with main land. The inhabited islands are connected with water based transport through improvised diesel operated mechanized boats. Concrete jetties have been constructed at almost all the ferry *ghats*, market places for boarding the vessels. One major bridge over Sutarbhog River has connected the Block head quarter with the district HQ.



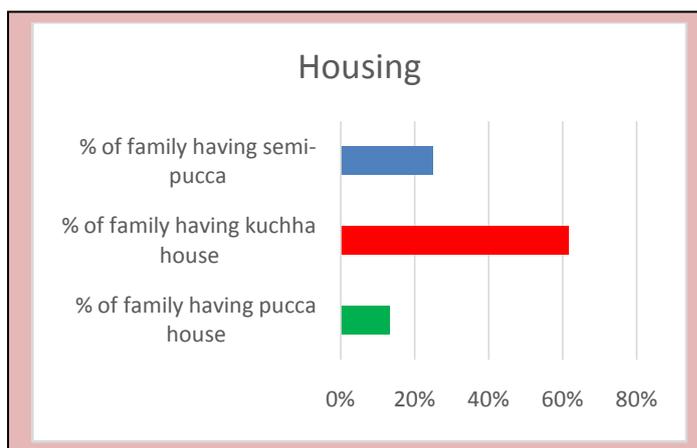
Villagers crossing the rivers near Ramganga (patharpratima) & Jetty near Ramganga

Electricity: The village is not electrified and though there are already electric poles in the village, due to lack of electric cable connections there, it has no electricity. Main source of illumination is therefore solar and kerosene lamps. Electricity problem has been identified as the second major problem in all the villages. Though few villages have electricity but majority of the household do not have legal connection and electric supply is also poor in terms of supply hours (worst during

summer) and voltage. So people mostly depends on either solar or kerosene lamps. As per the BDO and Panchayats the Govt. has taken a target of connecting all rural households. The household survey analysis show that 42% households do not have electric connection, only 31% of the households have solar panel installed on the roof.



Housing: Most of the houses are non-permanent kutchha type and thatched houses made of local materials (straw), which is very vulnerable to strong wind. After devastating Aila in 2009, people are still finding it difficult to build their house. In most of the villages lot of application have been submitted to the Panchayat for Indira Awas Yojana (IAY) now known as Pradhan Mantri Awas Yojana (PMAY). But very few of them (less than 10%) received the grant from Panchayat in last year. The household survey results show that 62% of the families have kuchha house.



A typical Kuchha house at Mahabatnagar

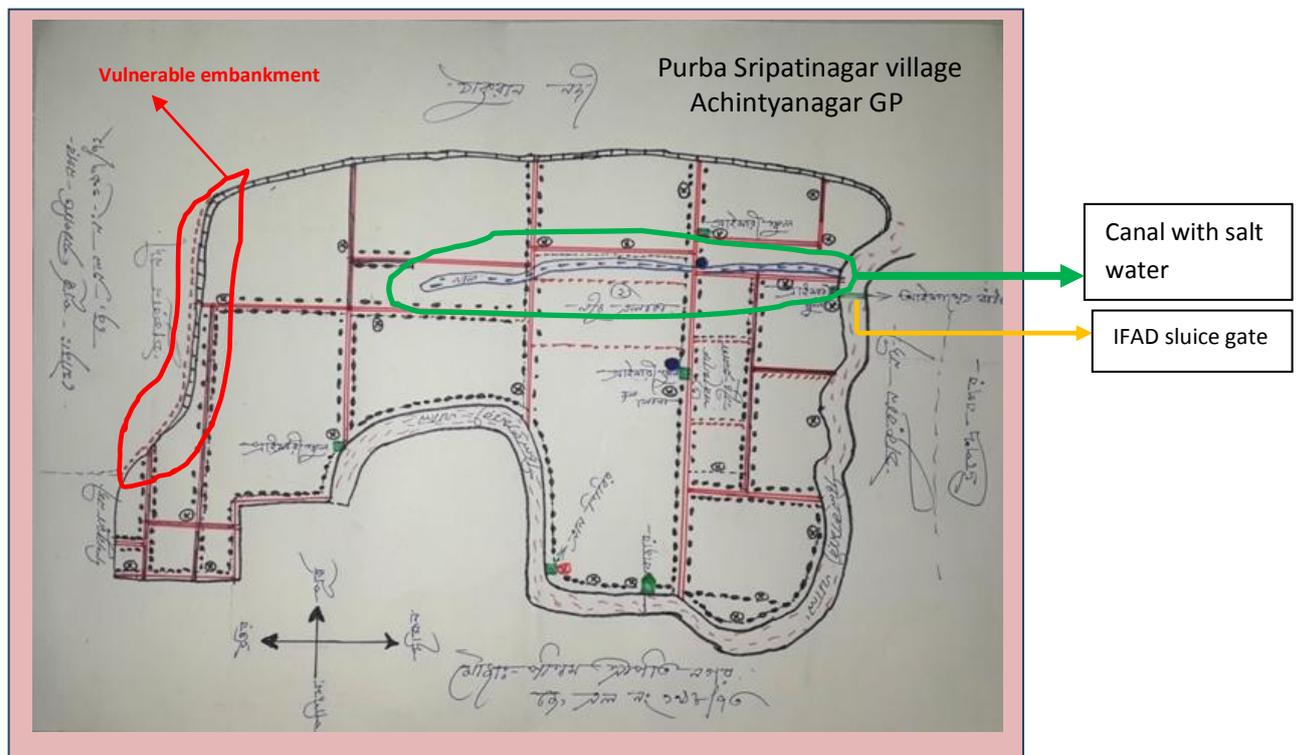
Disaster Risk Reduction

Patharpratima Block is very much prone to cyclonic storm originated from the low-pressure zone of Bay-of Bengal. As this is surrounded by rivers and sea, the earthen embankments encircled the island areas are mostly vulnerable to the upsurge & flash flood especially during high tide synchronized with the high velocity wind. Breaches of river & sea embankments, land erosion, land mass losses are major events during pre-monsoon period (i.e. from May) to post monsoon month (i.e. November) in each year. The devastating cyclonic storm AILA occurred on 25th May, 2009 seriously damaged the livelihoods & assets of 10 Gram Panchayats of this block. Most of the houses

are non-permanent kutch type and thatched houses made of local materials (straw). Norwester, hailstorm in summer months and cyclonic storm surges during pre-monsoon & postmonsoon months destroy thatched houses. Betel vineyards, the most important commercial crop of this block, are also vulnerable to these natural events to a large extent. The Villages located alongside the sea & estuarine waterways are mostly vulnerable to soil erosion, embankment failures, flash flood and tidal upsurge, etc.

The disaster risk is very high in Achintyanagar Gram Panchayat which is situated within a cluster of three Gram Panchayats viz Herambagopalpu, Lakshmijanardanpur & Achintyanagar which is completely isolated from the main land and surrounded by the rivers Mridangabhanga in the west, Pakhinal in the south, Thakuran in the east and Lakshmijanardanpur GP in the north. The villages are protected by the earthen dykes which are mostly vulnerable to natural disasters like cyclonic storm induced flash flood, land erosion, tidal surge and breach of embankments, etc. However some stretches of river embankments are strengthened with dry brick & brick block pitching. This GP is within 5 km of Sundarban Reserve Forest and around 25 km from Sundarban Tiger Reserve area.

In the focus group discussion and vulnerability mapping exercise at Purba Sripatinagar under Achintyanagar GP, villagers identified the vulnerability points along with weak embankment, drinking water problem, saline water intrusion and current situation of the evacuation shelter in the village. The evacuation shelter has been constructed at an isolated place and the condition is deteriorating because of no maintenance and use.



As per the villagers, repairing of the sluice gate made by IFAD will restrict the saline water intrusion into the canal and more than 300 acres of land can be used for second crop.

Discussion with all Gram Panchayat Pradhan indicates their priority on protecting the embankment through riverside plantation with mangrove and country side with other trees. Now the State Govt. has been implementing new scheme on plantation i.e. **'Briksha Patta'** in which ownership is given

to individual until the trees get matured and the profit will distributed among the owner and Panchayat.

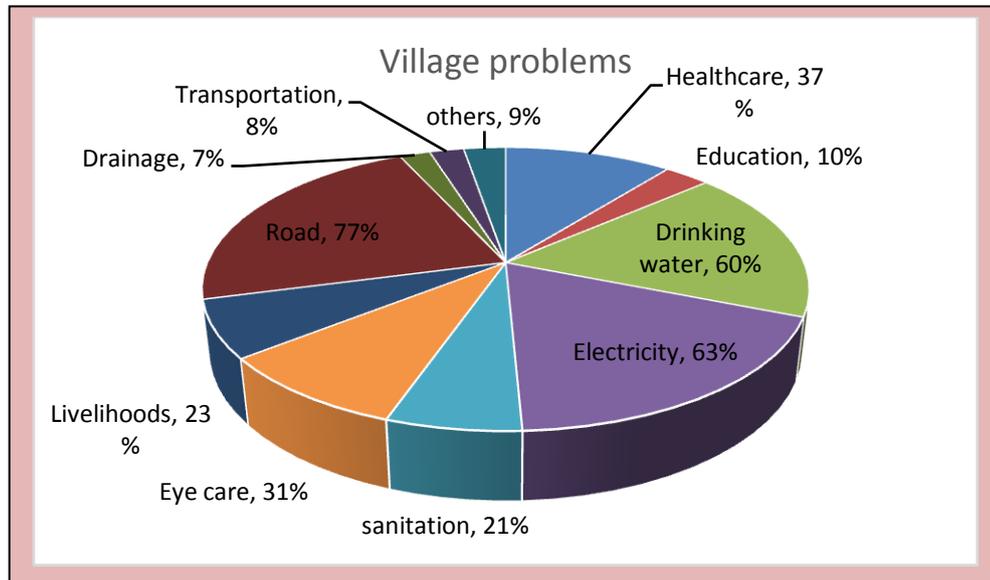
The FGD with teachers at Purba Sripatinagar Dr. B.C.Roy Memorial Vidyapith revealed that after Aila in 2009, NGO conducted two awareness camps on disaster risk reduction among school children but after that no follow up has been done. Now teachers, students are not prepared for future disaster and there is no evacuation plan, school safety plans.

Social issues

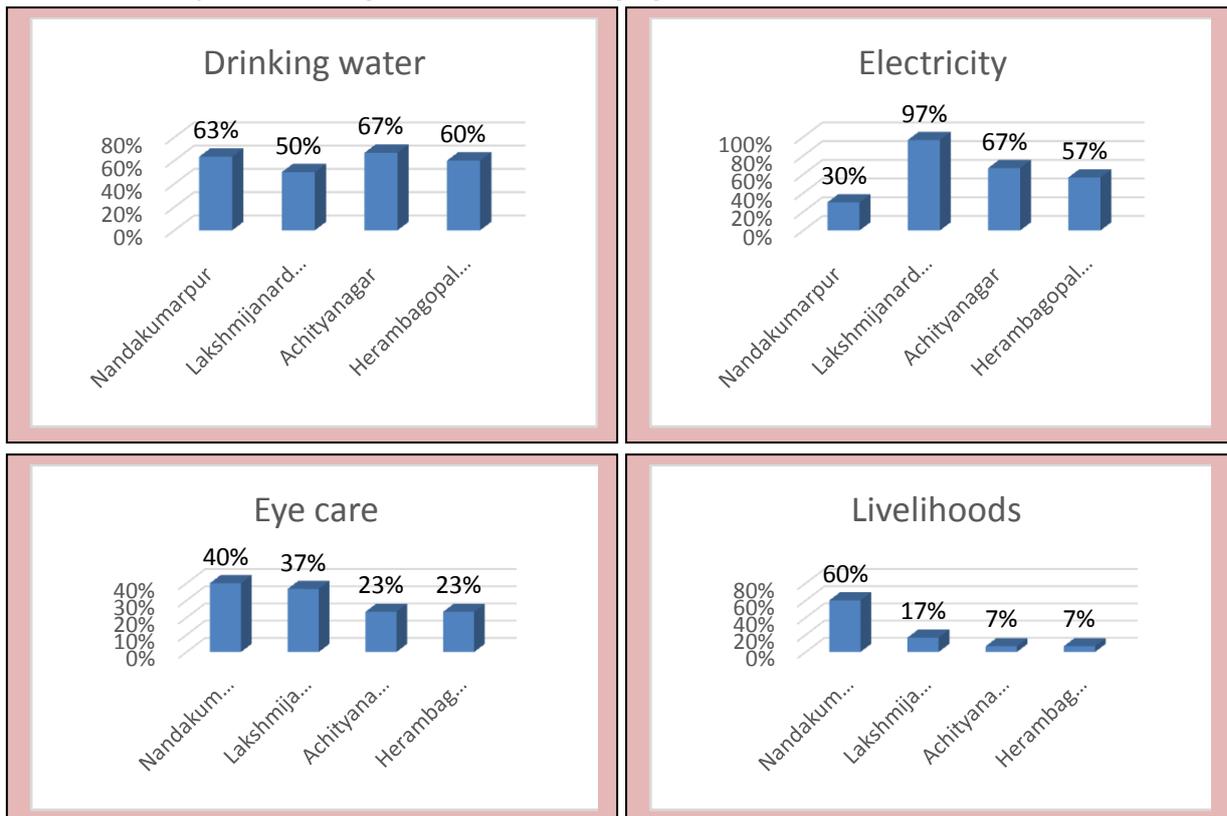
Early marriage has been identified as a major concern area in all the Gram Panchayats. The most challenge is that though this issue has been discussed in various forums like Pachayat meeting, SHG but it has not been recorded at meeting resolution for taking any concrete action. Students of Kuemuri Girls High School shared that there are many instances of early marriage, as many of their classmates (class X & XII) already are married. (13 out of 127 students in class X got married). BDO of Mathurapur-II also shared that this has been a major challenge for the administration to address the issue as the community is not taking any action against it. According to her social pressure within the community, from religious leaders and the peer groups i.e. classmates, class monitors can take greater role in addressing the issue. Innovative approach should be taken by all stakeholders to address this issue.

Chapter-V: Need analysis

The analysis of key findings mentioned above and the village level problems analysis in household survey has been consolidated to identify the major needs in the assessment area. The problems analysis revealed that most of the people have expressed their need for better road, electricity, safe drinking water, healthcare services (including eye care) and livelihood support.



The GP was analysis has been given in the following figures



In the above analysis people priorities has been analysed. For example, in Achintyanagar, peoples priorities are more on drinking water, electricity and healthcare services than livelihood support.

Needs and preferences shared by the community during Focus Group Discussion

The need and preferences shared by the community during focus group discussion and stakeholders' perspectives has been summarised in the following table.

Nandakumarpur	Achityananagr	Lakshmijanardanpur	Herambagopalpur
Community			
<ol style="list-style-type: none"> 1. Drinking water 2. Electricity 3. Support in education 4. Health care services (including eye care) 5. Vocational training for youth 6. Addressing early marriage 7. Livelihood support to SHG members & market channel/centre 	<ol style="list-style-type: none"> 1. Drinking water 2. Health care services 3. Electricity 4. Irrigation support – water conservation 5. Housing 6. Protection of river embankment 7. Better learning environment in school 	<ol style="list-style-type: none"> 1. Health care services (including sr. citizen) 2. Drinking water 3. Support in education 4. Irrigation support – water conservation 5. Storage facilities for potato 6. Sanitation 7. Addressing early marriage 	<ol style="list-style-type: none"> 1. Drinking water 2. Electricity 3. Health care services 4. Vocational training for youth 5. Addressing early marriage 6. Sanitation
Panchayat			
<ol style="list-style-type: none"> 1. Drinking water 2. English medium school 3. Health care services 4. Drainage systems improvement 5. River bank protection-social forestry 6. Jetty improvement & tourism 	Could not meet the Panchayat	<ol style="list-style-type: none"> 1. Sanitation 2. Drinking water 3. Addressing Malnutrition 4. Road access 5. Addressing early marriage issue 6. Agriculture extension support and storage facility 	<ol style="list-style-type: none"> 1. Road access 2. Drinking water 3. Health care services 4. Irrigation facility to increase vegetable production 5. Marketing support
Block Development Officer			
<ul style="list-style-type: none"> • Health care services & addressing malnutrition • Maintenance of drinking water facilities • Housing and sanitation • Addressing early marriage, gender 	<ul style="list-style-type: none"> • Awareness creation and motivating community, particularly focusing the ST and minority community on health, education, sanitation and early marriage • Addressing malnutrition- special initiative for proper implementation and strict monitoring of ICDS centres • Water conservation through MGNREGA 		

inequality • Innovative approach to address social issues	
Block Medical Health Officer	
1. Motivating mothers for child immunisation 2. Health care services to remote village through mobile health camp 3. Field based need identification and coordination with Sub-centre & PHC 4. Adolescent health & hygiene	1. Sanitation - Open defecation is still practiced by the community 2. Malnutrition- highest in the district 3. Early marriage and pregnancy - leads to unsafe motherhood and low birth weight of child 4. Health care services to remote village through mobile health camp 5. Motivating community to avail services from sub-centres
Community health workers	
1. Absence of healthcare services – dependence on RMP 2. Adolescent health & hygiene 3. Use of pond water for household use	1. General health care services & eye care 2. Early marriage and pregnancy leads to unsafe motherhood and low birth weight of child 3. Malnutrition of children 4. Adolescent health & hygiene

The analysis of key findings mentioned above and the village level problems analysis in household survey has been consolidated to identify the major needs in the assessment area. The problems analysis revealed that most of the people have expressed their need for better road, quality educational support, electricity, safe drinking water, healthcare services (including eye care) and livelihood support.

Road access: This is the preferred need expressed almost in all villages.

Healthcare services: Healthcare services at the remote villages & specialist doctors at Swarnalata Sabuj Seva Sadan in Nandakuamrpur.

Eye care services: Low cost eye screening, examination and treatment facilities, cataract and other surgical incidents, free medical camps & checkups.

Safe drinking water: More number of hand pumps, but deep tube well is preferred.

Educational support: Adequate and proper coaching and guidance to students with extracurricular activities.

Electricity: Electric connection and continuous power supply.

Livelihoods: Irrigation facilities for land holding families and livelihood diversifications for resource less households.

Chapter-VI: Possible Areas for Intervention

This section recapitulates the above analysis and provides a possible point of interventions on the point of assessments. This section prioritizes the needs for each target group.

Sector	Target Group	Needs	Point of intervention	Remarks	
Health & Nutrition	Community	Access to general healthcare services	Regular health camp at the remote locations (clustering villages) with mobile clinic facilities	Focus must be given to Achintyanagar GP where access to health care services is almost nil.	
	Sr. Citizen	Eye Health Care Services	Low cost eye screening, examination and treatment facilities, cataract and other surgical incidents, free medical camps & check ups	The existing infrastructure at Nandakumarpur can be used for developing a Eye Health Care Centre	
	Adolescent Girls	Adolescent health & hygiene practice	Improvement in knowledge and practices regarding reproductive health and with special emphasis on hygiene during menstruation. Awareness and counselling among parents regarding adolescence phase and support required.	All the Gram Panchayats, Schools can also be targeted (making group of adolescent girls student)	
	Mother & Child	Institutional delivery & Immunisation		Awareness and motivation of all mothers & family members in the areas where still home delivery occurs and people are less willing for vaccination.	Mahabatnagar, Kailashpur & Naraanpur in Nandakumarpur G.P, particularly focusing on minority community
			Delayed pregnancy particularly in case of early marriage	Awareness and counselling of young married couple for delayed pregnancy as evidence of low birth weight are there.	All the Gram Panchayats
			Addressing malnutrition	Promotion of nutrition garden and regular follow up on food intake (pregnant & lactating mother and child) with the help of nutrition monitoring toolkits	All the Gram Panchayats but focusing on Herambagopalpur (ST & minority community)
Education	Underprivileged children	Ensuring quality education	Establishing model schools at the remote areas Providing education support through learning centre	Focus must be given to the underprivileged children (dropped out or on the verge of drop out)	
Drinking water & sanitation	Community	Safe drinking water	Clean and sufficient drinking water are needed and deep tube well may be the option. Awareness on the use of filter and boiled water, particularly during rainy season. Formation of water users group to ensure maintenance and sustainability.	Focus must be given in the place where number of hand pump is very less than the requirement. Feasibility must be checked for deep tube well Sanitation will be addressed by Panchayat.	

Livelihoods	Farmers	Irrigation	For people who own land, better irrigation facilities are required. Water conservation through excavation and renovation of ponds, repairing sluice gate (controlling salt water intrusion)	Water conservation is priority for each location. In Nandakumarpur IWMP project from Dept. Of agriculture will address this issue, whereas in other panchayats in Patharpratima, convergence can be done MGNREGA. At Purba Sripatinagar the sluice gate can be renovated for fresh water conservation in the canal.
		Storage facility	Establishing small cold storage, particularly for potato	Focusing Maheshpur and surrounding villages under lakshijanardanpur. Feasibility (power supply, size of production) must be done.
	Vulnerable resource less poor	Livelihood diversification	Diversification of livelihoods through animal husbandry, poultry, fishery and other options are needed.	Priority must be given to ST community
Skill building	Youth	Vocational training	Establishing a vocational training centre for youth Training of youth on identified trade (as per interest area of youth)	This will help the youth either initiating their own enterprise or they can migrate with some skills
Energy	Community	Renewable energy – solar	Establishing community based solar mini grid Set up institutional mechanism for running the grid and maintenance	Focusing on the remote pocket which has not been connected yet.
Environment & Disaster Response	Community & school	Disaster preparedness	Increased community preparedness and response to disaster with specific focus in schools Developing and mainstreaming safety and contingency plan	Priority must be given to Patharpratima block, particularly Purba and Paschim Sripatinagar under Achintyanagar GP
		River bank protection	Demonstrate vegetative river bank protection by plantation in a scientific way.	
Basic Infrastructure	Community	Housing & Road	Facilitation support with Panchayat for prioritising the vulnerable Support for house building for extremely vulnerable family	Consultation with panchayat and block administration for better Road and connectivity.

Recommendation

Triangulation of results from FGD, Household survey and Stakeholders consultation revealed different needs of interventions & support for overall development of community. However access to general healthcare and eye care services, safe drinking water and electricity are the most preferred need expressed in FGD and household survey. The stakeholders' consultation also aligned to the observation made in FGD and Household survey. The second level priorities are irrigation and educational support. However stakeholders also suggested the needs of addressing malnutrition, early marriage and sanitation.

Based on the above analysis and feasibility of intervention and making a visible impact within different timeframe following recommendations have been made.

Short term initiatives

Drinking water: Intervention to ensure the availability of drinking water. Clean and sufficient drinking water are needed and deep tube well may be the better option. But feasibility should be checked.

Eye care services: Establishing low cost eye screening, examination and treatment facilities, cataract and other surgical incidents, free medical camps & checkups. The existing infrastructure at Nandakumarpur can be used for developing an Eye Health Care Centre.

Irrigation facilities through renovation: At Purba Sripatinagar the sluice gate can be renovated for fresh water conservation in the canal. It will restrict the saline water intrusion into the canal and more than 300 acres of land can be used for second crop.

Renewable energy – solar: Establishing community based solar mini grid and set up institutional mechanism for running the grid and maintenance.

Medium term initiatives

Access to general healthcare services: Regular health camp at the remote locations (clustering villages) with mobile clinic facilities.

Ensuring quality education: Establishing model schools at the remote areas. Providing education support to underprivileged children through learning centre.

Vocational training of youth: Establishing a vocational training centre for youth. Training of youth on identified trade (as per interest area of youth). This will help the youth either initiating their own enterprise or they can migrate with some skills.

River bank protection: Demonstrate vegetative river bank protection by plantation in a scientific way. A combination of multi-purpose & different type of grasses may be planted on

the country side river bank whereas a combination of different mangrove species may be planted at the different slope on the river side.

Storage/marketing facility: Establishing small cold storage, particularly for potato and market facilitation centre and transportation for bakery unit set up by the Sundarban Mahila Cooperative.

Housing & Road: Facilitation support with Panchayat for prioritising the vulnerable families. Support for house building for extremely vulnerable families. Consultation with panchayat and block administration for better Road and connectivity.

Long term initiatives

Water and sanitation: Awareness on the use of filter and boiled water, particularly during rainy season. Formation of water users group to ensure maintenance and sustainability. Awareness on use of toilets to ensure 100% free from open defecation.

Adolescent health & hygiene practice: Improvement in knowledge and practices regarding reproductive health and with special emphasis on hygiene during menstruation. Awareness and counselling among parents regarding adolescence phase and support required.

Mother & Child care: Awareness and motivation of all mothers & family members in the areas where still home delivery occurs and people are less willing for vaccination. Awareness and counselling of young married couple for delayed pregnancy as evidence of low birth weight are there. Promotion of nutrition garden and regular follow up on food intake (pregnant & lactating mother and child) with the help of nutrition monitoring toolkits

Disaster preparedness: Increased community preparedness and response to disaster with specific focus in schools. Developing and mainstreaming safety and contingency plan in school and community.

Livelihood diversification: Diversification of livelihoods through animal husbandry, poultry, fishery and other options are needed for vulnerable resource poor families, especially the ST.