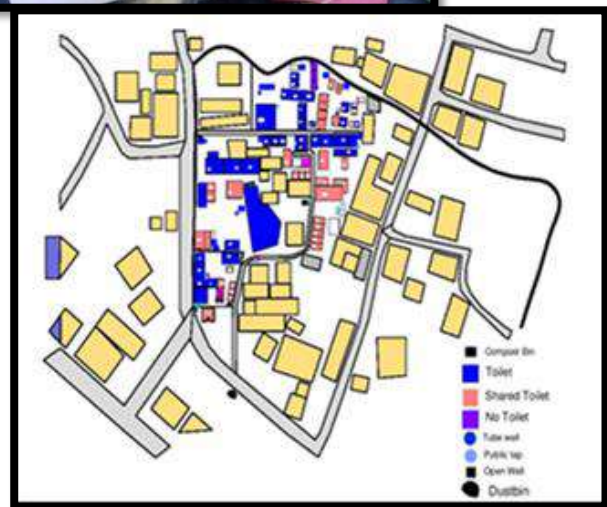


# Our Journey of Building Voice And Lives from grassroot level.....

## ANNUAL REPORT 2017-18



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***From the Director:***

*About one-third of total population of cities live in slum settlements. Out of this close to half of this population defecate in open. Quality of water is still a struggle as it threatens their health massively. Odisha high proportion of scheduled population are worst affected in slum settlement having open defecation as high as about 70% lack of space, polluted habitat and environment makes this ma*

*ssive proportion of population live under constant threat of T.B., Jaundice etc. So poverty is a vicious circle and urban poverty is not visible being over shadowed by aggregated data of well off population. Lack of toilet in urban situation is not just difficult for women but also susceptible to harassment and indignity. Not having a toilet in an anganwadi is like losing whole idea of education all campaign only. And mostly schemes are launched to treat symptoms more than root causes of such deficit. These investment are not losing money by Government rather create an equal and sensitive human environment for all. So UDRC attempt has been to create capacity building, community structure building for an institutional t set up support.*

*I thank all my colleagues at UDRC, Members of UDRC, Partners and Donors for their trust, support and guidance without which this work would not have been feasible. It's a great pleasure for me to write that we are a kind of successful in bringing our mission to reality.*

*Precendence setting through people driven projects and standard setting activities and social-technical context-oriented solution wanted for communities. These process empowered women to take the lead in prevention open defecation and ensure facilities through active NGO-community, Govt. linkage and negotiations. Each yea our journey encounters different set of challenges forcing us broadening horizon.*

***Ms. Monalisa Mohanty , Director***  
*Urban And Development Resource Centre(UDRC)*  
*Odisha*

## 2. About Us :

Urban And Development Resource Center (UDRC) was founded in 2008. The UDRC is a not-for-profit organization (NGO) set up under the Indian Trust Act, 1882. The main focus of the organization is urban poverty of Odisha and West Bengal, India. It work in collaboration with grassroots women groups and Odisha Slumdwellers Federation(OSDF)/Networks which has been working since 2000.

UDRC works in alliance with National Foundation for India(NFI), an NGO based in New Delhi. UDRC supports grassroots organizations for eastern regions by providing administrative, financial, documentation and other support and linking them with formal institutions so as to influence propoor urban policy and programmes with demonstration of good governance practices. UDRC does not manage the CBOs, but serves as a platform and catalyst for a decentralized, bottom-up, women-led organizational processes, rather than a topdown manager. Urban poor communities Networks or federations seek to explore development strategies and negotiate with city authorities. Women Collectives/Sangathans in communities are decentralized network of poor women's collectives that works at the settlement level, managing savings and credit activities, slum surveys and housing and infrastructure projects. UDRC keeps continuing it's tie up with National Foundation for India(NFI) in this year also and some left over activities of SRTT are also carried on.

### **Aim of the Organization:**

- The aim of the organization is to address urban poverty issues and produce urban and developmental practices and policies that are inclusive of the poor and less privileged ones.

### **Mission of the Organization:**

- To address the issues regarding shelter, basic services demonstrations.
- To Promote community led processes for accessing credit, skill and entrepreneurship opportunities through the Alliance and federation driven model.
- To articulate urban issues and help improve capacity of the urban poor to access government schemes addressing poverty alleviation, shelter and basic facilities and influence better sustainable and simple practices, Planning and Policy.
- To create ripples of change with a bottom up process for changing equations of relationships between poor and state for a more negotiable and inclusive governance mechanisms.

### **Vision of the Organization:**

- To provide solution for urban problems and push for a bottom up agenda where the urban poor become partners with the city and states with providing basic services like housing, sanitation, livelihood etc.

### **Goal of the Organization:**

- Address the issues regarding shelter, basic services, entrepreneurship and urban poverty through the federation model.
- Articulate urban issues and help improve capacity of the urban poor to access government schemes addressing poverty alleviation, shelter and basic facilities.
- Promote a model of community-based livelihood, housing, and infrastructure planning and associated technical solutions for inclusive habitat improvement of poor.

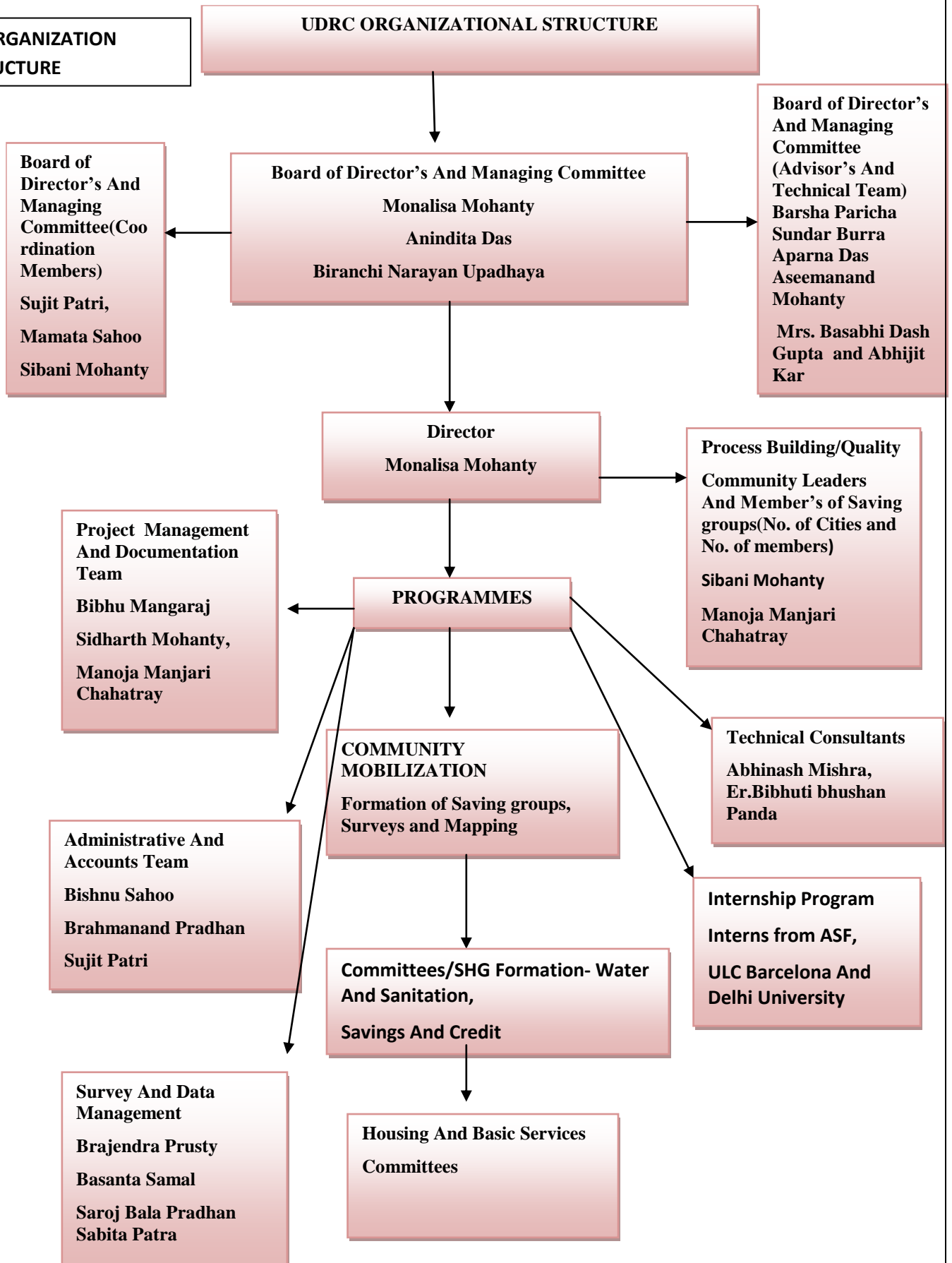
- To build the capacity of organized communities of the urban poor, especially women & informal settlements in Odisha and West Bengal to stop forced evictions and development and other resource providers around issues of housing ,sanitation, land, basic amenities and other urban development facilities.
- To explore community led solutions for urban problems and push for a bottom up agenda where the urban poor become partners with the city and states in creating basic services(sanitation and water), housing, livelihood etc.
- To initiate alternate simple technological solutions to complex urban issues to combat challenges of affordability, accessibility, acceptance and sustainability to make them applicable for all.
- To engage and negotiate with state/ Govt. on making projects and programmes led by stakeholders through bottom-up processes
- Promote a model of community based livelihood, housing, and infrastructure planning for building capacities of poor to work with state as equal partners.

### **Partners / Support Agencies:**

The various agencies with whom the organization is working such as;

- i. Society for the Promotion of Area Resource Center (SPARC)
- ii. DFID, New Delhi
- iii. Bhubaneswar Municipal Corporation
- iv. Berhampur Municipal Corporation
- v. Government of Odisha
- vi. Cuttack Collectorate
- vii. Participatory Research in Asia (PRIA)
- viii. Odisha Environment Congress(OEC)
- ix. Oxford Brookes University
- x. Sustainable Environment and Ecological Development Society(SEEDS),New Delhi.
- xi. Kamla Raheja Vidyanidhi Institute of Architecture, Mumbai
- xii. Homeless International
- xiii. UN-Habitat
- xiv. TATA Trusts
- xv. National Foundation of India(NFI)
- xvi. Azim Premji Philanthropic Initiatives (APPI)
- xvii. Puri-Konark Development Authority
- xviii. Cuttack Development Authority
- xix. Department of Fisheries, Government of Orissa
- xx. Department of Housing and Urban Development
- xxi. Cuttack Municipal Corporation
- xxii. Paradeep Port Trust and
- xxiii. BSHF, UK.

**3. ORGANIZATION STRUCTURE**



#### 4. HISTORY OF EMERGENCE

There is a small history for emergence of UDRC alliance in response to urban poverty issues. In the late 90's there were frequent evictions drives were going on by the Bhubaneswar Municipal Corporation(BMC) targeting the unauthorized slum-dwellers. As the slum-dwellers don't have the Patta/land right so they were forced to move to some other places. The Slum-dwellers were the city makers. They only build the city. But rather than giving them their fair dues, they were humiliated and forced to leave their houses. So that was a very unfortunate thing to happen.

At the mean time Urban And Development Resource Centre (UDRC) emerged as the lone Saviour for the urban poors. We negotiated with the Government and the urban poors to bring out a mid solution for this. It wasn't easy as we had to satisfy the both the parties. We worked as an Facilitator to rehabilitate the slum-dwellers by giving them their due rights. Such as-

- There were frequent disasters in the late 90's, the Super cyclone and in the early 2000 also there was flood.
- In the emergence of Alliance of SPARC-UDRC to respond to the situation by a bottom up approach to take slums as hope to further democratization, not problem to future land and city management strategies.
- The Niladri Vihar, Bhubaneswar eviction arised at late 90's when UDRC helped community to get resettled by negotiation support and survey support in the time of Super cyclone.
- In 2001 Munda sahi resettlement from sector 6 to 13 was done without a single police force with land and basic facilities by CDA.
- In 2003-04 Balijhara resettlement with Possession right and facilities for about thousand plus families initiated after negotiation with the Government.
- In 2006-07 Ring Road Project negotiated though could not be materialized then though land near Krushak bazar identified by Collectorate, UD Dept /Housing Board for drafting slum policy from this pilot.

#### PREVIOUS ACCOMPLISHMENTS

BBSR	2011-13 20010-16 2004, 2008 2007 2015-18	RAY city wide surveys, Mapping-City urban slum Database creation JNNURM/BSUP in-situ upgrading in Dumduma, Bharatpur and Nayapalli 2 yearly slum profile surveys. Electricity to Subhashnagar slum, Broad DPR for one slum in Salia Sahi NFI-APPI Projects/SPARC-SRTT Project
PURI	2010-16 2007-8	BSUP in-situ upgrading in Gokha Sahi, Mangala Sahi and Mishra Nolia Sahi Community toilet block in Pentakhota, Model house in Balia panda
CUTTACK	2010-11 2011 2006, 2012-14 2016-17	Munda Sahi Rehabilitation(CMC/CDA)/UN-Habitat funded participatory slum mapping project RAY city wide survey, SPARC project Ringroad Resettlement Proposal and DPR Mundasahi Resettlement of 113 Households , Community Toilet Federation slum surveys Community toilet block in Keshipur , Patas Colony, Credit based Housing, IHSDP/VAMBAY style Model Housing SRTT Project (TATA)
PARADEEP	2009-12	Housing projects in Balijhara, Udayabata Community toilet in Balijhara



ROURKELA/ JAJPUR/BERHAMP UR	2008-13	Water supply line built with loan in Netajinagar Small business loans in several slums/Housing Credit link at Jajpur IHSDP-TOILET Housing Project, Community Toilets
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### Projects Rationale and Outline:

There are various types of projects are being implemented by UDRC. These projects are mainly focussed towards capacity building, basic services like-water, waste and sanitation, housing rights and livelihood of urban poor. The projects are catagorised under following campaigns and stream of activities;

- Economic Empowerment -Savings andCredits.
- Empowering through sense of Identity, skill development for partnerships- Slum Surveys andMapping.
- Precedence Setting and Knowledgebuilding-Universal Basic Services Campaign for poor of cities e.g. Water and Sanitation, proper management of wastes organically.
- Forging Partnerships through Schemes of Government From Demolition to Planning and Resettlement, Designing Model Houses, Joint Surveys, negotiating for city scale housing strategy,Dealing with Eviction and Land rights-Planning Together withcommunities.
- Developing tools of sustainability to build voice in governanceallocations.
- Facilitating a bridge between Government and community in order to make them access all the suitable welfare Govt. schemes.
- Standard setting
- Incremental
- Small and simple steps with long term impact.
- Domestification and Technology for higher democratization.

### Our operation spreads in nutshell...

- About 3000 Mahila Milan members
  - Bhubaneswar and Cuttack city scale Settlement Surveys/Mapping – Bhubaneswar and Cuttack survey agency for people-driven process.
  - 3200 Existing Status Report for Detailed Project Report
  - Part of Ray Survey for 3000 households rehabilitated in-situ and Off situ
  - Hundred toilet seats completed, 2 lakh users,
  - 500 Housing Units potential users
  - Hundred individual toilet loans ranging from Rs.5000 to Rs.10,000
- Exchanges between communities, municipalities & countries

### Project/Process Details:

#### Economic Empowerment/ Self Reliance through Savings and Credits

The federation and Mahila Milan/Sanghathans provided loans to the other poor women in need at doorstep. This system builds the financial assets of the poor, builds managerial capacity of women's groups and strengthens bonds within settlements. The savings are used to make small loans for income generation, emergencies, housing improvements, weddings and other needs.

Besides these, they also provide loan for housing improvement/repairs, toilets and water provision and business loans to entrepreneurs to do business.

#### The Idea behind this system is:

To support poor families to get loans at doorstep in affordable rates to slowly come out of debt, build their assets and begin planning for the future.

To maximize people's participation and to ensure that the poor do not have to dip into their slowly



growing savings when they face a crisis.

To build managerial capacity and confidence in handling large sums of money which allows them to enter the public sphere and improve their position in the family, community and in the city etc.

### **Savings Position:**

Each group is having 10-20 members having the Corpus fund of Rs.3726430.00.

### **ACTIVITIES AND IMPACT:**

- The Savings and Credit system increases the financial assets of the poor, provides much needed credit at affordable rates.
- The Credit is taken for various reasons. Such as-toilet construction, water connection, small business for livelihood activity, medical expenses and housing construction etc.
- In many settlements UDRC has formed many Savings groups. Each Groups are formed by 10-15 members. The bank accounts are opened for each group. On monthly basis each members save a minimum fixed amount. UDRC also provides loan to them in 1% interest. The members do the repayment on monthly basis.
- It builds the managerial capacity of women's groups and strengthens bonds within settlements.
- All transactions are recorded and managed entirely by the women's collectives, who are trained by the NGO and peers from other cities with established Saving groups.
- The savings are used to make small loans for income generation, emergencies, housing improvements, weddings and other needs.
- The system is designed to truly support poor families to slowly come out of debt, build their assets and begin planning for the future.
- Compared to formal banks or micro-credit agencies interest rates are low, and there are no high Saving requirements and has a fixed repayment schedules.
- The idea is to maximize people's participation and to ensure that the poor do not have to dip into their slowly growing savings when they face a crisis.
- Through this process, women develop managerial capacity and confidence in handling large sums of money.
- They enter the public sphere and improve their position in the family, community and in the city.

### Capacity building and Democratisation:

The SPARC-NSDF-MM alliance has over the last 25 years developed a set of core activities that comprise what we call the “Federation model”. The core activities that make up the Federation model serve to deepen the bond between the Organizations and Communities, at the same time mobilizing and building the capacity of the poor for managing their own finances, participating in and planning urban development, and strengthening the broad-based networks necessary to generate the momentum and advocacy needed to prompt change at the policy level.

Whenever the Alliance enters a new community, it’s first step is to form settlement level, women-led saving and credit groups- the basic building block of the federation’s mobilization strategy. The Savings and Credit system increases the financial assests of the poor, provides much needed credit at affordable rates and most importantly builds managerial capacity of women’s groups and strengthens bonds with settlements.

Slum Survey by local women



Saving Activity by Mahila Milan

Women collectives or Mahila Milan/Mandals/Sangathans upgrade their capacities to map, adding to the experience of doing surveys. Additional organized community groups wereformed upcoming to the project involved. The confidence that has come by ‘doing’, allows women to negotiate better with government and professionals for a better planning. With this data is the opportunity to prioritize the needs of slum dwellers with them being at the centre of prioritization and decisionmaking.

## Projects

### Odisha Urban Habitat Improvement Strategy(SRTT-SPARC-UDRC)

#### AIM and Objectives:

To take up people-led planning, demonstrations for improving access to WATSAN (Water and Sanitation) for 1200 households in Bhubaneswar and Cuttack city. An ESR report was produced with status of each slum settlement and options for redevelopment.

#### Features of the proposal:

600 households to be covered across slums each in Bhubaneswar and Cuttack (About 6-7 slums each cities.)

- Areas of intervention include access to safe drinking water and water for potable and non-potable purposes, access to safe sanitation (elimination of open defecation), scientific and safe disposal of faecal sludge and household waste water and improved drainage systems to counter flooding.
- Implement pilot technological solutions to issues of water, sanitation and waste treatment and test them for scalability.

- Participation of the resident communities throughout the project life-cycle to create local capacities that become champions of taking this up with the city for scaling up.
- Participation of the resident communities to take up maintenance of the installed infrastructure.
- Leverage the efforts and resources of the state in programs related for improved access to WATSAN. For e.g. SWACCH BHARAT.
- The proposal will work in tandem with the state policies on provision of basic amenities and habitat improvement, and will seek convergence and will basically aim at demonstrating strategies that support scaling up the provision of basic services on a city-wide scale.

#### **Objectives of the proposal:**

- The basic objective of the proposal is to support city administration in delivering WATSAN services to the city's slumdweller through pilot projects that demonstrate scalable methodologies with people's participation- to make the pilot slums open defecation free, and ensuring each house has access to safe drinking water.
- To design and test strategies to improve access to safe water, sanitation and drainage in the slums of Bhubaneswar and Cuttack and therefore improve the health and quality of life of the slum residents.
- To test and demonstrate innovative technological solutions towards the issues in WATSAN.
- To undertake innovative strategies where communities in slums are organized, and participate in the intervention and therefore become important representatives of slum communities that work with the city and its elected representatives, to achieve the state goals in improved access to basic services and therefore improved health, on a city scale.

#### **Methodology**

Our method adopted a three pronged approach. First was the door to door household surveys followed by the physical survey. The third component of the method establishes a GIS database that can link the household surveys with the physical surveys. This will be presented on an open web GIS platform where some of the most critical attributes of the Household survey can be displayed as maps.

#### **Slum Profile and Household surveys:**

The first step of the process was called a "resolution". A series of meetings were conducted with the resident communities introducing the motive and the process of survey. The community leaders and the rest of the committee of the settlement wrote down the meeting minutes and created a document of the same which signed by all persons present for the meeting.

This was followed by the process of settlement survey which began with conversation with residents about understanding and documenting their own situation. This information was collected as forms and filled in through a group discussion where questions are answered by the group, instead of individual families as in the individual survey. During the same time communities were encouraged to draw up their settlement maps on a large chart paper where they indicated their own house and other structures, infrastructures, community spaces etc. This also helped the survey teams to number houses such that no structure is missed. Basic information including the name of the head of the family, simple family details are written into what is called a "Slum Register" which is then countersigned by the residents and becomes the basis for the final list of families reducing the chance of any errors.

For the actual door to door household survey Canvassers were used. They are the young residents of the settlements who are better positioned to collect the most accurate information from the fellow

residents. They were supervised by the professionals and federation staff to ensure that the forms are filled correctly and the questions are interpreted right. Forms were created in local language. Following this data was entered into excel sheet or simple data entry software and then analyzed for reporting.

**Physical Surveys:**

During the course of discussion with all stake holders it was observed that for proposing any form of intervention of improvements in the areas of water, sanitation and waste, a detailed physical mapping has to be conducted and should follow the household survey. The physical survey mapping hopes to provide the first accurate physical and spatial information of each of these settlements that can become suitable base information to begin any form of design intervention for habitat improvement.

The physical survey of the settlements was conducted in two parts. Part one was carried by a team of cadastral surveyors who mapped the settlement boundaries, Individual structures/houses with house numbers, road layouts, trees, street lights, community taps, hand pumps, wells, toilets common as well as individual where seen, house extensions, man holes, open spaces with in the slums, general topographical information in form of contours, nallas, water ponds etc. Part two was carried out by a team of two junior architects who performed the task of further verification as well as collecting new information that was vital for the study. These included establishing cadastral survey accuracy by taking some dimensions on site, account for all structures on the cadastral survey and household survey, identify and mark fresh water lines as well as wells, or bore wells, identify and mark sewer lines formal as well as informal, kitchen waste lines, storm water drain lines, add hedges, picket fences, shrubs and small kitchen gardens and community spaces.

The physical survey comes together in the form of an AUTOCAD drawing for each settlement where all information is indicated in specific layers. A common layer structure and properties is applied across all settlement drawings. The AUTOCAD layer structure and properties form the base drawings for all spatial analysis to follow as a part of the report.

**ACTIVITIES AND IMPACT:**

Another organization that has played a vital role in preparation of Existing Situation Report(ESR) is Kamala Raheja Vidyanidhi Institute of Architecture (KRVIA). ESR is a document that has KRVIA doing the major work supported by UDRC data and community consultation. The KRVIA proposal clearly spells out what the ESR will contain, and the timelines are also accordingly mentioned in it. It has mainly worked with technical designs .i.e. the GIS, Cadastral Survey and google maps of the slum. The technical recommendations is a part of ESR in the form of designs and the costs of engaging such designs. Inaugurated by Secretary, UD department and concluded by BMC and CMC officials.

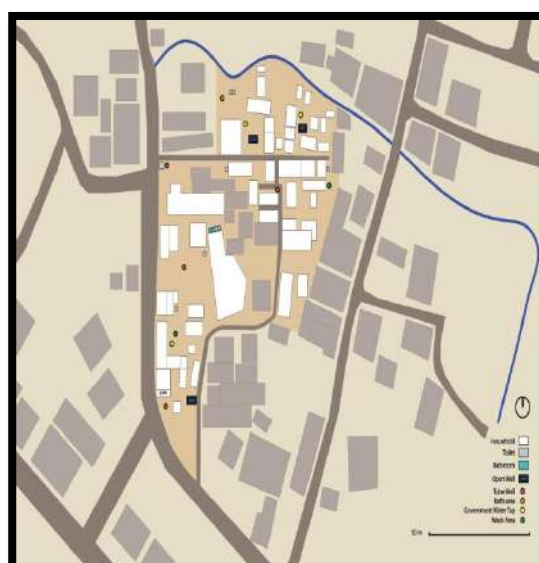
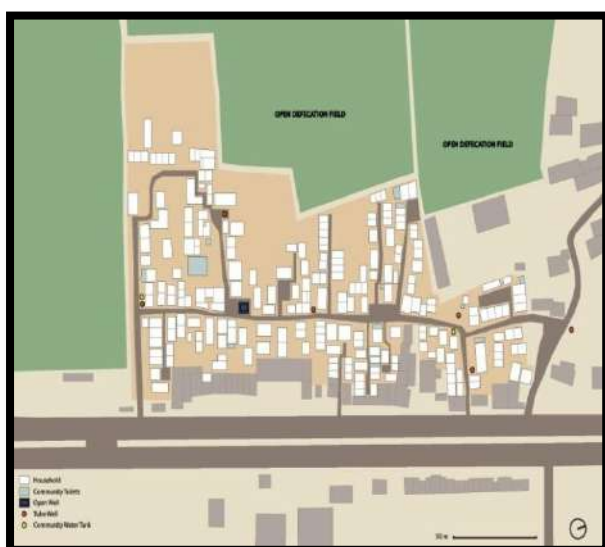
**INTERNSHIP UNDER UDRC:**

Two number of foreign students have undergone the Summer Internship Program under UDRC. Chiara Oggioni and Livia Anna Mikulec from Italy having the qualification of Master of International Cooperation Sustainable Emergency Architecture under Universitat International ULC, Barcelona were Interns for the period from 12<sup>th</sup> June-30<sup>th</sup> August 2017.They were first given an exposure to type of projects UDRC engaged in. Those were projects relating to housing, rehabilitation and resettlement and participatory enumeration and planning projects. She basically worked in documenting the project components, process, stages of the projects under jnnurm, Ray schemes (as implemented in alliance with SPARC, Mumbai). Besides they worked on the project on community based management system to address issues of water, sanitation and waste management which UDRC executes as a partner of NFI (National Foundation for India) project. They aimed to work on strengthening community based projects on water, sanitation and waste management program for a better quality of living with simple and small interventions. As they have visited some of the settlement of both cities of Bhubaneswar &Cuttack to understand the community behavior and their basic needs, processes and schemes of accessing them made them understand the urban context better in a different space.They were also engaged in mapping through GPS and Autocad so as to analyze impact of interventions and suggest further solutions and planning inputs.



So in nutshell following tasks either done:

- They helped in analysing baseline data collected in some of project slums and - fresh mapping with GPS/Autocad superimposition of five slum locations
- They helped in analysis of data to make an impact analysis of interventions taken (which is in progress)
- After completion of mapping work they were supposed to work on sustainable solutions, options and action level for better quality of water, sanitation and waste management with a proposed broad lay out planning both for spatial, action interventions and a Physical Toilet model with cost assessments.
- They have done the Autocad and Google mapping of many projected sites. Such as- Bargarh bhoi sahi, Bargarh Sabar Sahi, PatiaJalimunda sahi, Shantipalli and SiripurSabar Sahi.
- They have submitted the Reports of many projected sites of Bhubaneswar and Cuttack with respect to water, waste, sanitation and housing condition etc.
- A detailed report on Rain Water Harvesting was also submitted by them.
- They have designed the Malgodam Behera Sahi community toilet. It was one of the finest achievement by them.



### **Process And Stories of change: Typology of Models Emerged**

Strategies/Committee formation/Exchanges/Exposure/Workshop

### **Sanitation strategies**

Bridge finance model/Credit support -Rasulgarh Mangala sahi



**Maa Mangala Sahi-46**

**Abanti Nayak (credit linkage by UDRC)**



**Godam Sahi,**

**Laxmi Gouda(credit linkage by UDRC)**



**Community Meeting at Maa Mangala Sahi-46**



**Survey format fill up by tab at Adheikhal-B**





Listing, Numbering And Survey format fill up at Malgodown Behera Sahi



Community Meeting at Godam Sahi



## 6. NFI-APPI supported PROJECT:

Strengthening urban governance through community based water and sanitation management approach in select urban poor communities in the two cities of states of Odisha: Bhubaneswar and Berhampur city.

Cities- Bhubaneswar and Berhampur-11 slums for thousand plus households.

### Cities of coverage

- Bhubaneswar as the capital of Odisha has the population reaching around a million, have 436 slums. In which around 80% Households in slums don't have direct access to water and about 60% don't have proper sanitation system which driving them for open defecation as per RAY data analysis.
- Similarly Berhampur, fourth largest city having more than 3lakhs population where 33% are slum dwellers(256 slums reduced by delisting 163). Though it is the major commercial center for South Odisha, it is constantly being exposed to natural disasters.

### Methodology /Practices

- Awareness at household level on issues of access to safe water, sanitation and waste management.
- Awareness generation through interaction with public health professionals atcommunity level and happiness index practices through Groups and Committee meetings.
- Formation of the Committees, inclusiveness and capacity building of the Committees,engagement with the Corporators/officials and local bodies/water/sanitation/waste.
- Mapping and analysis demonstrable local innovative solutions/ models on water, waste and sanitation.
- Exposure, Orientation and training on community involvement and action(Workshops, exposure visits, meetings, city level and state level, advocacy workshops for Engineers, Officials and Local bodies; sharing best practices.
- Exposure, Orientation and training on community involvement and action including WASH and technical domain experts etc.
- Networking through meetings with other CSOs and local Government on enhancing urban quality of life documentation of good practices, case studies etc.
- Documentation of good practices, case studies, identification of domain experts, curriculum development, hosting Workshops, developing audio-visuals for dissemination.

- Undertaking the studies, developing Questionnaire, sampling methodology, analysis, finding report (Base line, Mid line, End line), field visits and interactions.
- Strong community structures with robust ownership of local and innovative solutions towards improved living environment/improved health of the community because of reduced risk to water, waste and sanitation challenges, Urban and local body/ERs recognize the significance of citizen networks, participation and inclusiveness for urban governance and management.
- Capacity of organizations enhanced to work on community management model.
- Operation and Management (O&M) established for community ownership institutional mechanism.
- Formation of URBAN innovation hub.
- Community structure for linkages.
- Government acknowledging value of working with community structures.
- NGO and CBO or Committee network.
- Higher knowledge for financial linkages through banks for incremental upgradation.
- Government knowledge and Institutional accountability to community services Civil Society Organizations (CSOs).
- Bigger stress on affordable basic service than real estate or technical way of approaching urban poverty.

### Basic City Information:

UDRC is operating in two cities of Odisha, i.e. Bhubaneswar and Berhampur in partnership with NFI.

### Bhubaneswar:

Bhubaneswar City	Total	Male	Female
City + Out Growths	8,85,363	4,68,043	4,17,320
Number of Municipal Wards	67		
City Population	8,40,834 lakh	4,44,806 lakh	3,96,028 lakh
City Household	2,01,873		
Literates	6,99,610	3,81,665	3,17,945
Slums	436		
Slum Population	3,01,611		
Slum Households	80,665		
Children (0-6)	81,847	42,997	38,850
Average Literacy (%)	91.87 %	94.66 %	88.73 %
Sex ratio	890		
Child Sex ratio	904		
Area	186 sq.km.		

**Berhampur:**

Brahmapur Town City	Total	Male	Female
<b>City Population</b>	<b>3,56,598 lakh</b>	<b>1,85,754 lakh</b>	<b>1,70,844 lakh</b>
<b>City Household</b>	<b>70,760</b>		
<b>Number of Municipal Wards</b>	<b>40</b>		
<b>Literates</b>	<b>2,89,590</b>	<b>156,787</b>	<b>132,803</b>
<b>Slums</b>	<b>254</b>		
<b>Slum Population</b>	<b>1,17,541</b>		
<b>Children (0-6)</b>	<b>32,174</b>	<b>16,848</b>	<b>15,326</b>
<b>Average Literacy (%)</b>	<b>89.26 %</b>	<b>92.83 %</b>	<b>85.39 %</b>
<b>Sex ratio</b>	<b>920</b>		
<b>Child Sex ratio</b>	<b>910</b>		
<b>Area</b>	<b>86.82sq.km</b>		

**Awareness :****Process: Reciprocal way of awareness with ULB and community**

The Awareness meetings are held by a defined process. The main objective of these meetings are to create an awareness among people regarding various implications and proper management of water, waste and sanitation. Community mobilization plays a vital part in this. At first the information regarding the meeting is given to the Committee members, leaders and the key members of the community. Govt./Health Officials and other organizations are given the intimation for health meeting or pro sports-activities etc. Dates are fixed. Resolution.i.e. the outcome of the meeting is written. All the participants sign the resolution for their confirmation.

**Awareness Meeting And Interaction with Professionals**

Total 34 nos. Awareness programmes and meetings held related to health, SBM, PMAY, Smart city related beneficiaries to connect with CLTCs and associated cells in BMC in Ward no. 45 and all NFI settlements besides Godam sahi and Mangala sahi-46 of Bhubaneswar and at Bijipur bauri sahi, Mochi Sahi, Sibani Nagar, Bhabani Nagar, Ambapua Bauri Sahi and Ka;ua Bauri Sahi of Berhampur. At Berhampur some meetings were held for creating a toilet revolving mechanism for construction and maintenance of new and dilapidated toilets. Repair and renovation strategies were discussed for defunct toilets. From the credit fund of UDRC some families are granted loan for construction of toilets and they repay the amount by paying the installment on monthly basis. Many smart water provision meetings also carried on such as- maintenance of water storage tank, methods of purifying the water etc. at Berhampur.

Besides these health programmes held and follow up for enhancing health seeking behavior among the adolescent girls in the presence of health professional at Shantipalli. There was distribution of Sanitary pads for its use. The importance of hygiene is explained as well as the issues of sanitation

and water was also discussed. Another Health Awareness meeting held at the Anganwadi centre, Bargarh Sabar Sahi regarding occurrence and prevention of various diseases like-Malaria, Dengue, Diarrhea and sanitation issues involving NUHM officials, UDRC staffs and Community people etc. An Awareness program held at Shantipalli for the children and women regarding the various implementations done .i.e. the installation of Terafil, well rejuvenation etc. and it's impact on people with respect to .water, waste, sanitation by entertainment program.

Sports and happiness are key tools for involving children as well as building positive and active mindsets. So towards this direction UDRC has initiated its partnership programme this year with Pro Sports, New Delhi, which trains, mentors and supports children of underprivileged background and their associated schools on different sports.

A meeting held at Shantipalli (ward no 37) and Bargarh sabar sahi (w-45) involving the community leaders regarding management of solid wastes. These trainings were designed to educate and mobilize community leaders on how best to manage solid waste so that it doesn't pollute the environment, how to segregate the solid and wet wastes separately and can be disposed in a proper manner.

**Bhubaneswar-Shantipalli (Ward no.37)**



**Berhampur-Ambapua (Ward no.40)**



**Formation of Committees, Corporator**

### **Meeting, Mapping And Implementation**

#### **Process:**

At first the community meetings are organized to form the committee. Then Committee members are selected by the community people. The number of members is 10-12. The Resolution is drafted and signed by all the Committee members. The Committees mainly looks after the Operation and Maintenance(O & M) work of all the implementations.

The major role of committees are to involve Corporators, demonstrate scarcity in mapping exercise and developing such inclusionary skills for every household to get involved and discussing on different solutions and their process of implementation and maintenance. In this process a officiation process is introduced to make these community processes inclusionary in decision making and

procedures of resolutions and basis of priorities laid down which are basis of deepening of democracy.

Corporator Meetings are organised in all slums for availing the various Govt. Schemes to the community, sometimes for Committee formation and for implementation of any solution. Mapping is one of the vital part in implementation of solutions.

The Cadastral/on-site mapping gives an overall picture of the settlement .e.g. the entry point, exit point, water, waste and Sanitation points etc. The Community leaders, people and UDRC team does the Mapping work and the hand drawn maps are prepared. As far as the implementation/solution is concerned at first the community leaders/people meeting is organized. The Resolution is drafted regarding the outcome of the solution and signed by all the participants..Thus, the decision of the solution is made. It is more of a people-driven rather than process driven activity

City	Community Name	Committee Formation
Bhubaneswar	<b>Patia Jalimunda</b>	<b>4</b>
	<b>Shantipalli</b>	<b>2</b>
	<b>Bargarh Bhoi Sahi</b>	<b>2</b>
	<b>Bargarh Sabar Sahi</b>	<b>2</b>
	<b>Siripur Sabar Sahi</b>	<b>1</b>
Berhampur	<b>Khaja Street</b>	<b>3</b>
	<b>Mochi sahi</b>	<b>3</b>
	<b>Bijipur Bauri Sahi</b>	<b>3</b>
	<b>Ambapua bauri sahi</b>	<b>2</b>
	<b>Kalua bauri sahi</b>	<b>2</b>
	<b>Dhimira Bauri Sahi</b>	<b>2</b>
	<b>Total</b>	<b>26</b>

- Total 7 nos. of Corporator Meetings held in various projected sites of Bhubaneswar and Berhampur. Meetings with Corporators of each ward have been held and their vital contributions towards this programme has been almost achieved. Our field coordinators have also scheduled various community led discussions with the Corporators about the various scheme related challenges and mitigation strategies. The meeting with the Corporator at Patia Jalimunda sahi leads to water connection in AMRUT scheme which is a huge achievement.
- After the Midline survey, the difference between the Base line and Mid line was shown in Auto cad mapping. Total three years mapping differences are shown in the maps. The maps show the differences of water, waste and toilets(community, individual and shared) points and their impact on people in all the project related sites of Bhubaneswar and Berhampur. But Sanitation mapping done only in Kalua Bauri sahi and Mochi Sahi as all the other sites are having open defecation and they don't have the provision of sanitation. The technical team is now working to implement more innovative and sustainable solutions for water, waste and sanitation management.



- Total 36 nos. of implementations were carried out at the projected sites of Bhubaneswar and Berhampur related to water, waste and sanitation. A Community level plantation work done at Siripur Sabar Sahi.
- The construction of two number of community toilets and installation of two no. of Septic tanks done at Siripur Sabar sahi.
- At Patia Jalimundasahi, a Composting dustbin was installed. The work of this dustbin is to prepare the compost from the daily domestic/kitchen wastes and recycle, it and use for further harvesting and plantation. People are using and maintaining the dustbin.
- The first sample plastic brick is made for experiment. UDRC is doing the experiment for it's usage and sustainability. But tests need to be done using technical methods to certify that.
- Training given on the usage of Smokeless Chullah and handed over to the Community. Here the response is not very satisfactory because the flame is very low which makes the exercise very timetaking and so it does not impress much. There is need for aligning the design to increase flame so that it makes feasible for them to use andis compared to stove or regular chullah even though smoke is there.
- Facilitating governance system , loan given to the beneficiaries and the revolving fund is used henceforth for construction of IHHL. 14hh received Work Order for construction of IHHL and full complete-4 at Siripur Sabar Sahi. 25hh received Work Order and full complete-12 at Bargarh Sabar Sahi. 23hh received Work Order at Patia Jalimunda sahi. 36hh received Work Order and full complete-36 at Shantipalli ,80hh received Work Order and Half stage-1, 4 IHHL-complete at Godam Sahi and at Maa Mangala Sahi(46) 30 nos. of IHHL built.
- At Bargarh Sabar Sahi, the flooring work of the Anganwadi centre and repairing of Anganwadi toilet was done by UDRC. The sewerage and water connection was also made to the toilet.
- At Bargarh Sabar Sahi Primary school sports materials such as-Seesaw, Slider , Swing chair and chain were supplied by UDRC for the overall development of children both mental intelligence and physical and to inculcate a habit of playing outside among the children.
- A 2 Seater Children's toilet with the Septic Tank and a bath place for women was constructed and the Boring system was installed at Patia Jalimunda Sahi. The main water pipe connection was laid down to the settlement in the AMRUT scheme.
- Construction of urinal space for women with waste water treatment tank .i.e. ground water recharge pit with waste water recycling at Patia Jalimundasahi.
- Renovation and Repairing of U.P.school toilet at Patia Jalimundasahi.
- Supplying of outdoor sports materials like- Seesaw, Slider , Swing chair and chain for U.P. School children at Patia Jalimundasahi.
- Under Amrut scheme a Water ATM is installed by BMC with the continous follow up by UDRC at Champapokhari, Ward no.45.
- In this year, BMC has allotted us the Ward no.45 to make OD free. The sites were Akhandalamani basti, Kalpana flat basti, Kela basti, Champa Pokhari and Bargarh Sabar Sahi etc.The IHHL Survey and the Cadasta Mapping was done at these sites.The Cadasta mapping-hand drawn maps done to know the exact location of the toilets and their households in the slum.
- At Bargarh Sabar Sahi, for the Anganwadi toilet, a upgraded affordable Ring Septic tank was constructed.
- In the first year We did the Cadasta mapping. We get to know the entire geographical area and the households of the settlements we are working in.
- Then we put that in the Autocad map to know the exact location of the water, waste and sanitation points in the settlements.

- In the second year, after the Midline survey we prepared the Google maps of each settlements and located all our innovative solutions, water, waste and sanitation points in them. At the end we super-imposed the Google maps in to the Autocad maps.
- A water solution done at Berhampur by constructing a water tank with Motor facility at Bijipur bauri Sahi .
- The beneficiaries of Ambapua Baurisahi made housing under IHSDP scheme but they haven't made toilet in their houses. So, the Berhampur Municipality did not release the last phase amount of housing construction as they don't have toilets in their houses. Hence, the IHHL scheme was not introduced by the Municipal officials. Then after the intervention of UDRC, they were able to build toilets by taking Rs.5,000 as a loan for 10 families each and now another 2 families covered. Now they have applied for the last phase amount of housing construction. Now 10hh built the IHHL toilets.
- There are 18 no. of construction of IHHL toilets in process(18-complete) at Bijipur Bauri Sahi followed up to access scheme SBM besides a water initiative taken with a water tank, pump to supply water for 33 families in the settlement.
- At Kalua Bauri sahi there was leakage of water pipe connection passing through that community. People collecting water from that leakage pipe which lead to suffering from many diseases. And there was no other means to meet their drinking water need. One Municipality water pipe stand point (little hard water) was connected to the Slum by community initiative with UDRC Support in Kalua Bauri Sahi with some up- gradation.
- The construction of water storage tank with motor pump facility made at Dhimira Bauri Sahi to reduce the water issue.
- To reduce the open defecation habit of people Coconut tree plantation done at the field of Ambapua Bauri Sahi where people used to go for defecate.
- Cleaning and Renovation work of Community toilet was done by UDRC at Lanjipalli, Pandav Nagar and Kampa Sahi etc..
- Five no. of households started the construction of IHHL toilets at Sibani Nagar.

### **Sector specific Model**

#### **Strategies for stories of change: Impact And Barriers**

**This process evolved new processes and models to derive community models to address WATSAN**

#### **SANITATION-Social Solutions**

1. Bridge Finance Model with IHHL Scheme
2. Incremental Model for children toilet introduction in anganwadis to schools to community
3. Linkages with scheme governance-SBM accountability through coverage follow ups
4. Triggering accountability through community defunct toilet structures activation
5. Promoting shared low-cost toilet construction for habit change
6. Creating womens collective's new role of maintainance of defunct toilets through collaberations with ULB(berhampur
7. Repair and renovation strategies of defunct Community toilets and establishing community management systems through Linkages with ULBs.



8. Integrating compulsory safe secure toilet provisions in earlier housing schemes eg IHSDP or RAY and Innurm etc
9. Promoting shared idea of toilet use

#### **Technical local Solutions**

10. Promoting shared/Cluster waste water and septage management through DEWAT and Septic DFAT systems
11. Integrating bath and childrens toilet or Urinal provision
12. Innovating Plastic tanks to replace, reuse or recycle for a safe septic systems.

#### **Barriers:**

1. Inadequate infrastructure and Govt. approval for the solution.
2. Non-available of the raw materials.
3. Lack of community space.

#### **Water**

1. Installation of pumps to lift water
2. Multiple Taps
3. Water Recharge Tanks for reuse Urinals
4. Increasing access to Piped Water
5. Credit Based Water Connections
6. Water Quality redressal through Terrafil solutions

#### **Barriers:**

1. Quality of water.
2. Scarcity of water supply.
3. Water supply timing and force.
4. Inaccurate documentation for the connection.

#### **Waste Management**

1. Composter Innovation being installed in several Parks of Berhampur
2. City Scale Composting with eco fuel to shops to manage waste
3. Segregation and Cxomposting Practices

Other Components eg Road and electricity construction in many of these settlements as WAT-SAN segment being attended

#### **BARRIERS**

Defunct Toilets still not taken care of for revival

Drains polluting water sources need ULB interventions being neglected

Slow response by ULB on their commitment but there is more connection and confidence established

Over Documentation and slow Work orders in SBM

No Concerns of ULBs on unsafe soak pit constructions in low lying areas

**Water Test Report- BeforeAnd After Terafil Installation**

**AQUACHEK**  
THE WATER TESTING FACILITY  
FROM EUREKA FORBES LTD.

**TEST REPORT**

Report No. : 12366-16	Date of report : 19 <sup>th</sup> July, 2016
Sample code No. : 12366	Page(s) : 1 of 1
Sample collected on : 15 <sup>th</sup> July, 2016	Source : Bore Well Water (Shanti Pali Slum)
Name of customer : Ms-Urban & Development Resource Centre	
Address : Patia Station Road, Near Patia College, Patia, BBSR Ph-9238070503	

Sl. No.	PARAMETER TESTED	RESULT	IS: 10500-2012 Drinking Water Specification (Second Revision)	
			Requirement (Acceptable limit)	Maximum Permissible limit(In the Absence of alternate source)
<b>Physico-Chemical Analysis</b>				
1.	Odour	Agreeable	Agreeable	-
2.	Taste	Agreeable	Agreeable	-
3.	Turbidity	NTU	5	No relaxation
4.	pH Value	6.5	6.5-8.5	5.0
5.	Total dissolved solids	286.0	500	2000
6.	Total Hardness as CaCO <sub>3</sub>	173.0	200	600
7.	Calcium as Ca <sup>++</sup>	38.4	75	200
8.	Magnesium as Mg <sup>++</sup>	18.6	30	100
9.	Total Alkalinity as CaCO <sub>3</sub>	96.0	200	600
10.	Chloride as Cl <sup>-</sup>	55.1	250	1000
11.	Total Iron as Fe	3.4	0.3	No relaxation
12.	Nitrate as NO <sub>3</sub> <sup>-</sup>	<0.01	45	400
13.	Sulphate as SO <sub>4</sub> <sup>-2</sup>	11.6	200	400
14.	Fluoride as F <sup>-</sup>	<0.01	1.0	1.5

Remarks: The above water sample does not conform to IS: 10500-2012(Second Revision), Drinking Water Specifications with respect to the tests conducted.

Bharati Tower, Block - A, Ground floor  
Forest Park, Bhubaneswar -9  
Tel: 7735812583  
Mob: 8895268019, 9861130540

Lab Address: Mail [bhulab@eurekaforbes.co.in](mailto:bhulab@eurekaforbes.co.in)  
SAMPLE COLLECTED BY PARTY NOT DONE BY US. Authorized Signatory

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**AQUACHEK**  
THE WATER TESTING FACILITY  
FROM EUREKA FORBES LTD.

**TEST REPORT**

Report No. : 1466-17	Date of report : 09 <sup>th</sup> Nov, 2017
Sample code No. : 1466	Page(s) : 1 of 1
Sample collected on : 1 <sup>st</sup> Nov, 2017	Source : Bore Well Water* (Shantipal Terafil Filter)
Name of customer : Ms. LDRC	
Address : Patia, BBSR Ph-9238070503	

Sl. No.	PARAMETER TESTED	UNITS	RESULT	IS: 10500-2012 Drinking water specification (Second Revision)	
				Requirement (Acceptable Limit)	Maximum Permissible Limit in the Absence of Alternate source
<b>PHYSICO-CHEMICAL</b>					
1.	Odour		Agreeable	Agreeable	Agreeable
2.	Taste		Agreeable	Agreeable	Agreeable
3.	Turbidity	NTU	1	1	2
4.	pH value		7.2	6.5-8.5	No relaxation
5.	Total Dissolved Solids	mg/l	94.0	500	2000
6.	Total Hardness as CaCO <sub>3</sub>	mg/l	40.0	200	600
7.	Calcium as Ca <sup>++</sup>	mg/l	18.0	75	200
8.	Magnesium as Mg <sup>++</sup>	mg/l	7.0	30	100
9.	Total Alkalinity as CaCO <sub>3</sub>	mg/l	34.0	200	600
10.	Chloride as Cl <sup>-</sup>	mg/l	24.0	250	1000
11.	Total Iron as Fe	mg/l	0.3	0.3	No relaxation
12.	Nitrate as NO <sub>3</sub> <sup>-</sup>	mg/l	1.0	45	400
13.	Sulphate as SO <sub>4</sub> <sup>-2</sup>	mg/l	+0.01	1.0	1.5
14.	Nitrite as NO <sub>2</sub> <sup>-</sup>	mg/l	<0.01	45	No relaxation

\*Sample collected by party not done by us

Remarks: The above water sample conforms to IS: 10500-2012(Second Revision), Drinking Water Specification with respect to the tests conducted.

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Phone: +91-33-247554

**BOD Test Report-Bargarh Sabar Sahi**

**TEST REPORT OF WATER SAMPLE as per IS: 3025**

REQUISITIONING OFFICE: Urban Development Resource Centre  
Kalyani-nagar, Bargarh  
Patia, Bhubaneswar.

LETTER No. 703 DATE: 27/01/2018

WORK REFERENCE: Laboratory testing of Water sample

SAMPLE REFERENCE: Water Sample TYPE: ---

SCOPE: Bargarh Sabar Sahi (100 L) 2 nos.

DATE OF RECEIPT OF SAMPLE: 29/01/2018 DATE OF TESTING: 29/01/2018 to 02/02/2018

DATE OF ISSUE OF TEST RESULT: 05/02/2018

Sl. No.	Description of Test	Results obtained	Test Methods
1	BOD at 20°C	6.2 (3)	IS: 3025 (plate)

Lab. No. 18018

The parameter searched with an 'e' are not searched by XLAB.

**AUTHORITARY**

**Before-After Photos**

**Bargarh Sabar Sahi Anganwadi School Flooring**



**Bargarh Sabar Sahi Anganwadi toilet**



**Anganwadi Ring Septic Tank**





**Sports Material installation at Bargarh Sabar Sahi School**



**School toilet at Patia Jalimunda sahi**



**Plastic Septic Tank for children's toilet at Patia Jalimundasahi**



Patia Jalimundasahi water connection in Amrut scheme



Patia Jalimundasahi school toilet



Patia Jalimundasahi ladies bathroom





**Construction of toilet(IHHL) under SBM scheme, Rasulgarh Sabar Sahi**



**Renovation of community toilet at Lanjipalli, Berhampur**



**Renovation of Community toilet at Pandab Nagar, Berhampur**

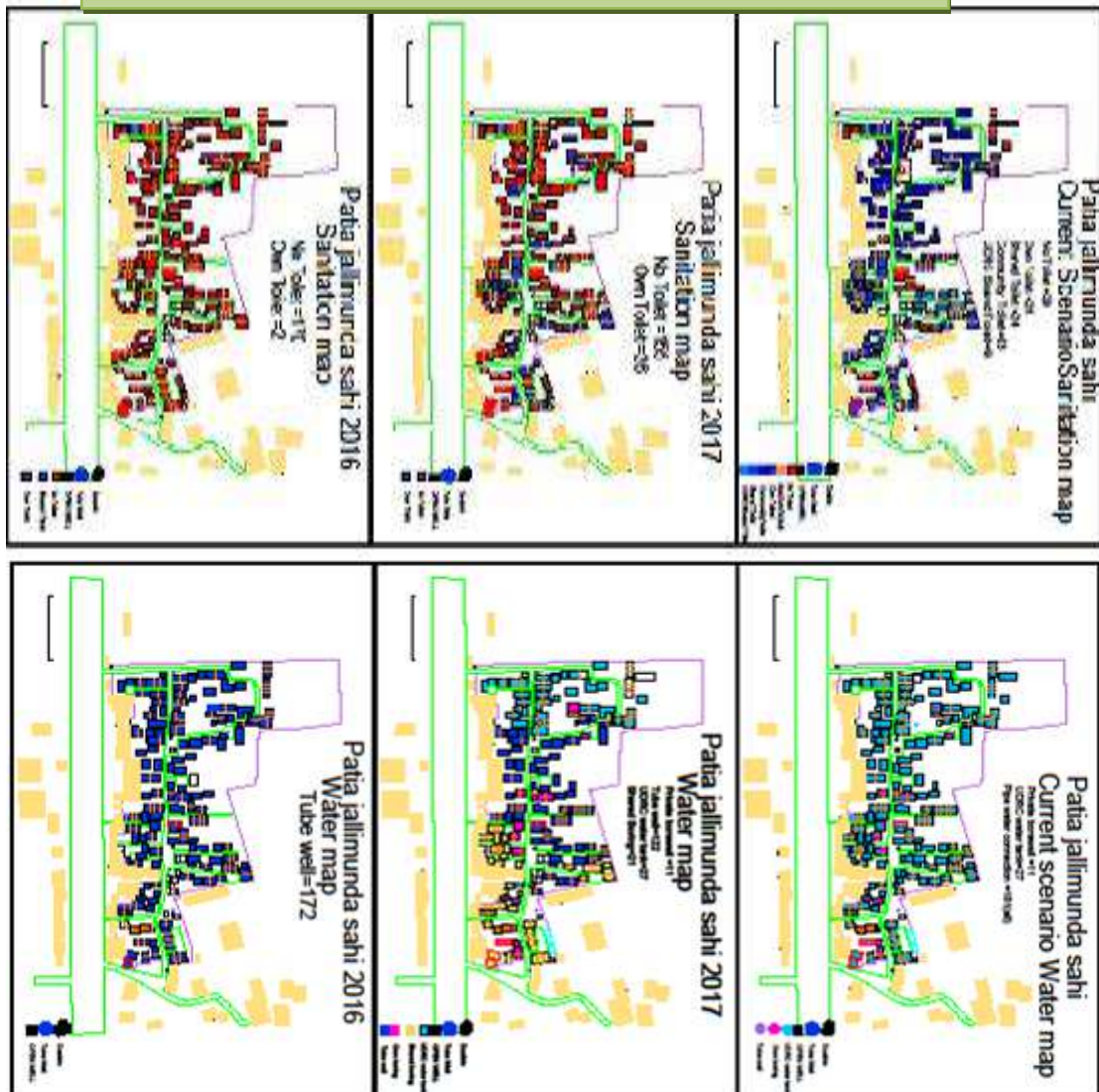


Renovation of Community toilet at Kampa Sahi, Berhampur



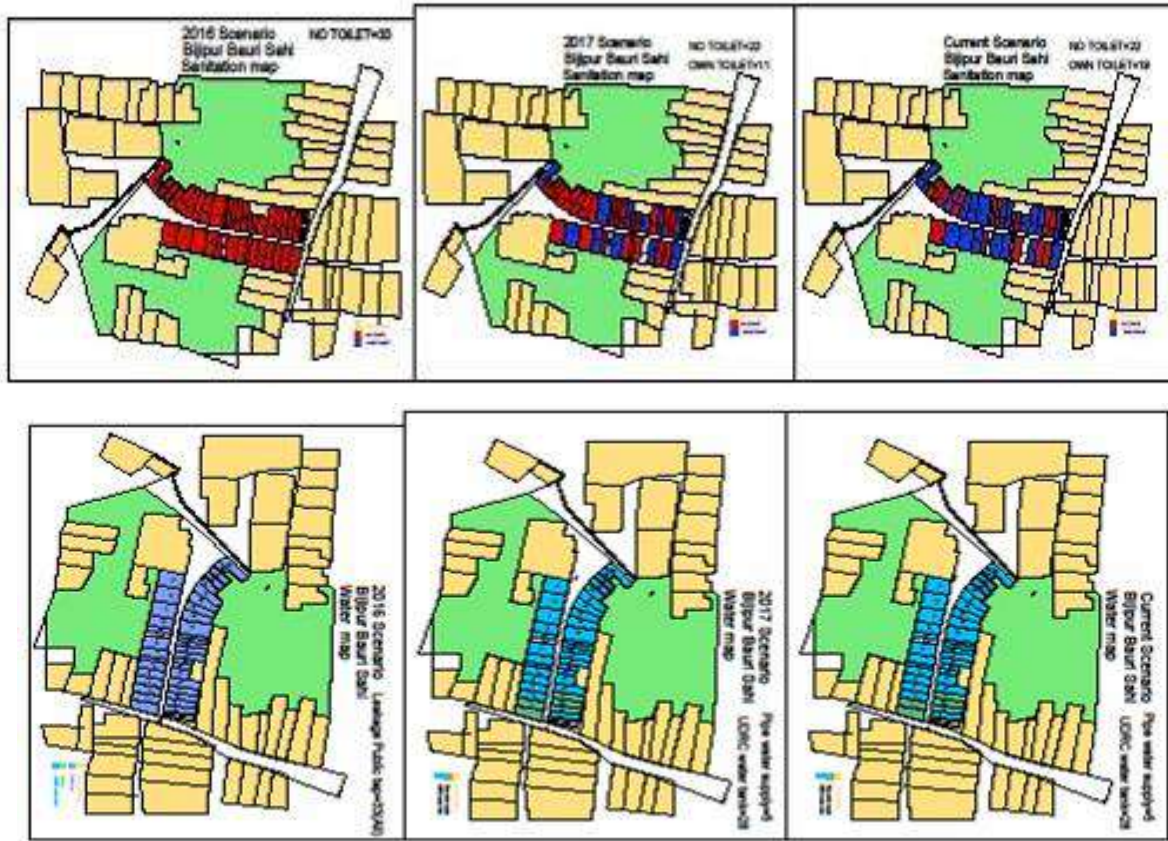
MAPPING DIFFERENCE YEAR-WISE

Patia Sanitation-Water Map





### BIJIPUR BAURI SAHI SANITATION-WATER MAP



Mapping is a very vital part of any settlement empowerment and change process. The community people directly do the mapping in papers. They do the road map to the settlement locating each and every points like- the entry point, drain, road, water points and toilets etc. That is called Cadasta mapping. Then the UDRC team takes the Google earth image of the particular settlement. That image is verified in the settlement and in the Cadasta map. Lastly, taking into consideration the survey report, in the Autocad software, the map is drawn. The maps are prepared to show the status of water, waste and sanitation points. This Process helps them compare, take assessment in each year and own the information so increases accountability.

**Group Formation:**

City	Community Name	GROUP FORMATION
Bhubaneswar	Patia Jalimunda	5
	Shantipalli	8
	Bargarh Bhoi Sahi	2
	Bargarh Sabar Sahi	3
	Siripur Sabar Sahi	3
Berhampur	Khaja Street	1
	Mochi sahi	2
	Bijipur Bauri Sahi	2
	Ambapua bauri sahi	1
	Kalua bauri sahi	4
	Dhimira Bauri Sahi	1
	<b>Total</b>	<b>32</b>

- The SHGs are formed by a group of people especially by women. They do generally the Saving and Credit activity. The loan is taken mostly for building toilet and business purposes.
- Linkage with the Government and other agency partners is one of the activities for the Group for accessing all the welfare schemes of the Govt. such as- SBM, AMRUT and PMAY etc.
- One of the main functions of the Group is to maintain Livelihood for them. It can be achieved by doing small businesses. Such as- preparation and selling of pickles, papads, home made spices, handicrafts and sarees etc.
- One each group meetings held with the Corporator at Mochi Sahi and Ambapua baurisahi respectively involving the UDRC staffs and the community people focussing on the water, waste and sanitation issues.
- A group meeting held at Akhandalamani basti involving UDRC staffs and community members and formed an SHG for micro-credit and Saving purpose.

**Exposure and orientation and training on community involvement And State level and city level advocacy workshops for Ers/officials and local bodies**

**Process:**

At first a meeting is organized in the community for the Exposure program to be held. Selection is done from the community people who all want to go for the program. It is done to have a real feeling of the innovative and sustainable solutions/implementations that have been taken place, about their impact in the life and how it has worked as a catalyst in bringing the behavioural change among people. In the Govt. Level also the meeting is organized with the concerned authority for the Exposure program. Some responsible staffs having the domain experts are selected and sent for the program. Thus, UDRC facilitates the ULBs and Community people in exploring new things. The same process is followed for organizing the Training/Symposium/Workshop programs.

- An exposure visit made at Seva Mandir, Dilwara which strives to provide education, health, jobs and lot more to the people and facilitate a process of self governance through community structures.

- An exposure and Orientation meeting conducted at Bengaluru with Nalini Shekhar, the Co-founder and Managing Trustee of Hasiru Dala regarding sustainable opportunities for waste pickers and other informal waste workers in the urban areas..
- A two day review meeting was held for all partners of NFI at Chas city of Jharkhand regarding water, sanitation and waste management for low-income communities of 12 cities in Jharkhand, Chattisgarh and Odisha. This partner's meet was mainly focussed on the contribution of all the partners in terms of achievement in work front and the future plan of action.
- Another program organized at The Energy and Resources Institute(TERI),Bangalore organized by e-parivartan regarding Solid waste management and it was accompanied with site visit showing innovative and sustainable waste disposal system.
- Prior to the Workshop of Bhubaneswar there was an exposure visit of Berhampur Municipality officials to various projected sites of UDRC at Bhubaneswar with UDRC team to know about some innovative interventions.
- An Workshop conducted at Kalinga Ashok Hotel, Bhubaneswar regarding various issues in context to water, waste, sanitation and Govt. linkages involving Bhubaneswar/Berhampur ULBs, CBOs, UDRC staffs and community people.
- Total 40 nos. Of community people from different communities such as-Bargarh Sabar sahi, Siripur sabar sahi, Shantipalli, Nayapalli sabar sahi and Rasulgarh Sabar sahi visited each others settlement and observed their solutions and implementations with respect to water, waste, sanitation and slum development in the community. At the end everybody gathered at Shantipalli and had a meeting with the UDRC staffs regarding different issues of their community and also ended with some fun and entertainment programs with the children and women group.
- Another Partners meet held at New Delhi for all the partners of NFI in respect to water, sanitation and waste management for low-income communities of 12 cities in Jharkhand, Chattisgarh and Odisha. This partner's meet was mainly focussed on the contribution of all the partners in terms of achievement in work front and the future plan of action.
- A participation workshop conducted at Xavier University Bhubaneshwar regarding gender, community based participation methods and local governance system involving the university officials, student group and UDRC staffs etc.





**fig-1- Workshop at Kalinga Ashok Hotel, Bhubaneswar**



**fig-2-Partner's Meet at New Delhi**



**fig-3-Partner's Meet at Chas City Bokaro**



**fig-4--Awareness And Exposure Program At Shantipalli**



**fig-5-Workshop At TERI, Bangalore**



**Fig 6-Presentation at XUB in a participatory planning workshop**

### Midline Survey

The Midline survey carried on in all the projected sites of Bhubaneswar and Berhampur and the data entry of the survey report is done inside the office. Generally an Canvasser is selected from the community to fill the questionnaire sheet. As he/she is from the same community they know the required data well and can collect the same efficiently. So that helps in doing the survey and community participation plays a vital role in this. Mapping is also co-related with Survey. In the Survey work Identification, Listing, Numbering of the households is done. Then the Questionnaire is filled up by the Canvasser.



fig-1- Mapping at Bargarh Bhoi Sahi



fig-2- Survey at Patia Jalimunda sahi



fig-3--Mapping at Patia Jalimunda sahi



fig-4-Survey At Patia Jalimunda Sahi

## 7. DESIGN AND COSTING DETAILS

SL No	CITY	SLUM NAME	Technological Solutions	Number of beneficiaries (HH)	Quantity	Cost(Rs.)	COMMUNITY PARTICIPATION
1	BHUBANESWAR	PATIAJAL LIMUNDA	WATER TANK WITH PUMPING FACILITY	50	1	39382	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
2			TOILET(ANGAN WADI CHILDREN)	50	1	27980	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
3			WASTE WATER RECHARGE USING PLANTATION		1	NA	LABOUR AND PLANTS
4			WELL REJUVINATION	70	1	12810	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
5			DFWT SEPTIC TANK	50	1	13000	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
6			COMPOSTING DUSTBIN	50	1	2800	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
7			2 SEATED CHILDREN TOILET, 1 WOMEN URINAL AND BATH PLACE WITH WATER RECHARGE PIT	50	1		30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
8		SHANTIPALLI	WELL REJUVINATION	59	1	6680	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
9			DUSTBIN	59	1	3760	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
10		SHANTIPALLI	WELL REJUVINATION AND BATHROOM	65	1	20580	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
11		SHANTIPALLI	FITTING OF TERAFIL FILTER	250	1		30% COMMUNITY PARTICIPATION THROUGH LABOUR COST



12		BARAGARH SABAR SAHI	BATHROOM	65	1	26935	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
13		BARAGARH SABAR SAHI	TOILET	30	1		30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
14		BARAGARH SABAR SAHI	DFWT SEPTIC TANK	30	1	13000	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
15		BARAGARH SABAR SAHI	ANGANWADI CENTER FLOORING WITH TOILET PAN FITTING AND INNOVATIVE SEPTIC TANK		1	32324	
16		BARAGARH SABAR SAHI	OUTDOOR SPORTS MATERIAL PROVIDED TO BARAGARH SABAR SAHI SCHOOL		3	22	
17		Siripur Sabar sahi	PLANTATION			5460	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
18		Siripur Sabar sahi	COMMUNITY TOILETS AND SEPTIC TANKS		2 , 2	35000	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
19	BERHAMPUR	KHAJASTREET	COMMUNITY TOILET	65	1	35000	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
20		KHAJASTREET	DRAIN RENOVATION	65	1	9000	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
21		BLJIPUR BAURI SAHI	WATER TANK WITH MOTOR	30	1	31905	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
22		MOCHISAH	RENOVATION OF COMMUNITY TOILET	35	1	10759	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
23		MOCHISAH	BATHROOM	42	1	12470	30% COMMUNITY PARTICIPATION THROUGH LABOUR COST
24		MOCHISAH	DRAIN REPAIR		1	8630	30% COMMUNITY PARTICIPATION THROUGH LABOR COST



## 8. CHALLENGES

The challenges are huge and multi-faceted. It is just the right approach which can turn the challenges into the right solution.

- Urban risks such as no water or over flooding or **lack of options for safe sanitation/ sewerage etc are part of struggles of all settlements**. Each and every day they have to face challenges for water, sanitation and garbage disposal as ULB services are difficult to reach due to lack of management and space issues.
- Families without toilet are those who are really poor so options for building toilets not there as per their purchasing capacity some times.
- Environmental issues involved in soak pit toilet where water table is close to soil.
- Due to **lack of space/temporary housing-** community solutions also involve risk of time taking and lengthy/difficult procedures for NOCs/SBM from Governance bodies.
- The existing solutions **are controversial** in terms of their impact which needs to be circulated if experiment already made e.g Terafill, Non RO systems any other affordable options –**so Innovation/doing differently in design/financing** is a big challenge.
- All cities cannot be in same pace **so each city /site** -understanding, rhythm could be different so accordingly the intervention.

### State Level

- Why sanitation is still a state driven not people driven-people demanding and how do we modify so that it is more accommodative and responsive to people(choices are so limited).
- State/ULB- Swatchh Bharat Abhiyan document based approach, SC/ST question(certificates clause)than planning/community oriented approach is going to be a bottleneck to its implementation.-Creating mix of centralised and decentralised system in place for a safe sanitation move.
- There is Squeezed scope for innovation/Flexibility in design/finance/procedureif a standardized design.
- Bigger cities, bigger challenges of survival, least space and less time for community-To give time for negotiations in such work or government facilitation workis a challenge.
- The Government is not willing to take riskswith not much understanding yet but due to the pressure to deliver, they are coming forward to help or else to conduct other projects would become difficult for them.

## 9. Lessons Learnt:

There are some crucial elements need to be integrated in watSan /WASH activities. Learnings can be listed below as follows

- The context- based approach is the key to solution. Because every settlement is different from other with respect to its geographical location, population, water, waste disposal system and sanitation availability. So, decentralized solution can bring some sizeable impact.
- **Linking issues of Poverty, Technology and Innovation**– The three issues should be inter-linked or else the approach will do no good. By this only the proper solution can be made out which would be beneficial to the people. And when technical solutions marry with local knowledge and need then become more meaningful, effective and practical and problem solving

- **Co-production for change** : A partnership of different entities : Donors, Government of Odisha, Technical professionals/Institutions, SPARC, NFI, UDRC and the network of slum dwellers. These are the pillars which can bring the positive impact among the people as a whole.
  - **Leverage state resources** for the urban poor and demonstrate how such a partnership achieves such leverage, building everyone's capacities to envision scale. It is just the cooperation from grassroot to the highest level that brings the cohesive change.
  - **Institutionalization of community participation:** It is the process of inclusive participation of the community in all the developmental and State-sponsored programmes.
  - **Incrementality character of change** need to be acknowledged and is most suitable approach in change so gradual, phasewise engagement leads to bringing paradigm shift in equations of power. Context and peoples unique rhythm and pace dictate the narratives to bring real improvisation
- Demonstration of the application of innovative technologies and strategies to address the issues of urban poverty: The application of technology and it's sustainability for the urban poor is the most vital part. The technology should be people-friendly in order to be accepted and recognized or else it can't bring a big impact in the lives of people.

### 10. BHUBANESWAR IMPACT

SANITATION –OD (TOTAL COVERAGE NUMBER)	PATIAJALIMUNDA SAHI	BARAGARH SABAR SAHI	TOTAL	IMPACTS ON OTHER SLUMS
House hold	181	101	282	554
IHHL -	13%	25%	38%	12%
Shared	20 HH	8 HH	28 HH	60 HH
Community Toilet construction	1 (6 seater)	1 seated	Nil	Nil
Open defecation	16%	5%	21%	45%
Waste water Treatment	1	Nil	Nil	Nil
Faecal Treatment	2 nos (20 HH benefited)	1No.(8 HH benefited)	3 Nos. (28 HH benefited)	Nil
Revival of Public Toilets	Nil	Nil	Nil	Nil
Extension to other slums	Nil	Nil	Nil	7 (Akhandalamani Basti, Champapokhari, kela sahi, kalpana flat basti, Rasulgarh, Mangala Sahi, Godam Sahi) Community managed- BMC-Sulabh / Livelihoods project- NULM collaboration
Water-Access/Quality				
Facility access	After intervention of UDRC 100% In house connection through Amrut Scheme	60% have taken individual connection		Bargarh sabar sahi
Quality-Terafil	Nil	Nil	Nil	Shantipally
Sustainability (Recharge)	Patia munda	Nil	Nil	Nil
Revival	Nil	Nil	Nil	Nil
Waste Management – composting				
Segregation	Nil	1 no. compost bin provided to make dry waste	Nil	Plastic Compost Bin under preparation
Vermiculture/Gober gas	Nil	Nil	Nil	Nil
Biogas	Nil	Nil	Nil	Nil

### 11. BERHAMPUR IMPACT

Sanitation-OD (Total Number)	Coverage	DhimiraBauri Sahi	BijipurBauri Sahi	Total	Impacts on other slums
Household		117	33	150	904
IHHL		30 (25%)	17 (51%)	47	12
Shared		Nil	Nil	Nil	
Community Toilet construction		Nil	Nil	Nil	
Open defecation		87 (75%)	16 (49%)	103	
Waste water Treatment		Nil	Nil	Nil	
Faecal Treatment		Nil	Nil	Nil	
Revival of Public Toilets		Nil	Nil	Nil	3(29seater)(Pad ab Nagar,Kampa Sahi,Langipalli)
Extension to other slums		Nil	Nil	Nil	5(Pandab Nagar,Kampa Sahi,Langipalli, Sibani Nagar,Bhabani Nagar)- Community managed- BMC-Sulabh / Livelihoods project- NULM collaboration
Water-Access/Quality					
Facility access		61 (52%)	33 (100%)	94	
Quality-Terafil					
Sustainability (Recharge)					
Revival					
Waste Management –composting					BMC/E & Y / UDRC –Langipally 5 no of wards – both slum and general
Segregation					1unit(Mardarajpur Vending Zone)
Vermiculture/Gober gas					1unit(Mardarajpur Vending Zone)
Biogas					1 unit(Mardarajpur Vending Zone)



## **10. CONCLUSION**

UDRC adopts the people-oriented approach rather than the State-oriented . It takes into account different tools such as- capacity building, skill development , inclusive people approach and pilot demonstration projects etc. to drive the process of partnership. This year being a catalyst for change and showing the highest amount of impact in people's lives with respect to water, waste, sanitation and livelihood management. The impact is quite positive from the slum level, Government, technological applicability, demonstration for change and to the partnership with the entities. In all the projects the urban poor is being highlighted while the policies is being formulated in the process to understand what makes them work and what will ensure that a policy is not only on a paper or statement without any ground implication but in good intent of accommodating the aspirations and expectations of poor and women. NGOs and CBOs of the poor should be involved in the process and the policy to ensure that they participate centrally in both. This year is quite an achievement not just in terms of number but also in quality and inclusive participation it is the inclusive participation of all stakeholders that makes the difference.