BUILDING HEALTHY CITIES

Indore Workshop Report: Community Data Walks

October 2021 – January 2022

Contents

Acronyms

ANM	auxiliary nurse midwife
ASHA	accredited social health activist
AWC	Anganwadi center
AWW	Anganwadi worker
BHC	Building Healthy Cities
CBO	community-based organization
CM&HO	Chief Medical & Health Officer
CNG	compressed natural gas
FLW	frontline worker
ICCC	Integrated Command & Control Centre
ICDS	Integrated Child Development Services
IMC	Indore Municipal Corporation
ISCDL	Indore Smart City Development Limited
ISSW	Indore School of Social Work
JSI	JSI Research & Training Institute, Inc.
LCS	low-cost air quality monitoring sensor
MCH	maternal and child health
MP	Madhya Pradesh
MPPCB	Madhya Pradesh Pollution Control Board
NGO	nongovernment organization
NRC	nutrition rehabilitation center
PUC	Pollution Under Control
RTE	Right to Education
UPHC	urban primary health center
USAID	United States Agency for International Development

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Cover Image

Community data walk participants in Amar Tekri. Image courtesy of JSI.

Introduction

The United States Agency for International Development (USAID)-funded Building Healthy Cities (BHC) project aims to refocus city policies, planning, and services with a health equity lens while improving data-driven decision making for Smart Cities in India, Indonesia, Nepal, and Vietnam. Planning for a Smart City is intrinsically linked to health: transportation, the environment, sanitation, education, recreation, technology, and the built environment all influence the health of an urban population. When decision-making across these areas is harmonized, people will benefit from improved access to health services, decreased environmental and lifestyle risk factors for chronic diseases, a lower burden of infectious diseases, and an increased availability of useful data for decision-making.

BHC engages with sectors that contribute, directly or indirectly, to citizens' health (particularly women's and children's health) and quality of life. This multisector engagement, the first core value of BHC, aims to provide all municipal sectors a common understanding of how they contribute to health. The second BHC core value is to strengthen community engagement in municipal decision-making, especially for those most vulnerable to health shocks. BHC's third core value is supporting use of data for planning and decision-making. Informed by these three core values, the project is working to improve healthy urban planning.

In Indore, India, BHC is jointly implemented with Indore Smart City Development Limited (ISCDL) with the objective of making the city a "healthy, livable Smart City for all." BHC organized a series of data walks between October 2021 and January 2022 in seven of the eight informal settlements that previously took part in a participatory research survey under BHC (in partnership with Center for Urban and Regional Excellence) (Sharma et al. 2020; Bakhtawar et al. 2022). The eighth neighborhood, Kadavghat, received a resettlement notice after data collection was completed, making it impossible to conduct the data walk.

Figure 1. Community Data Walks Timeline, October 2021 - January 2022

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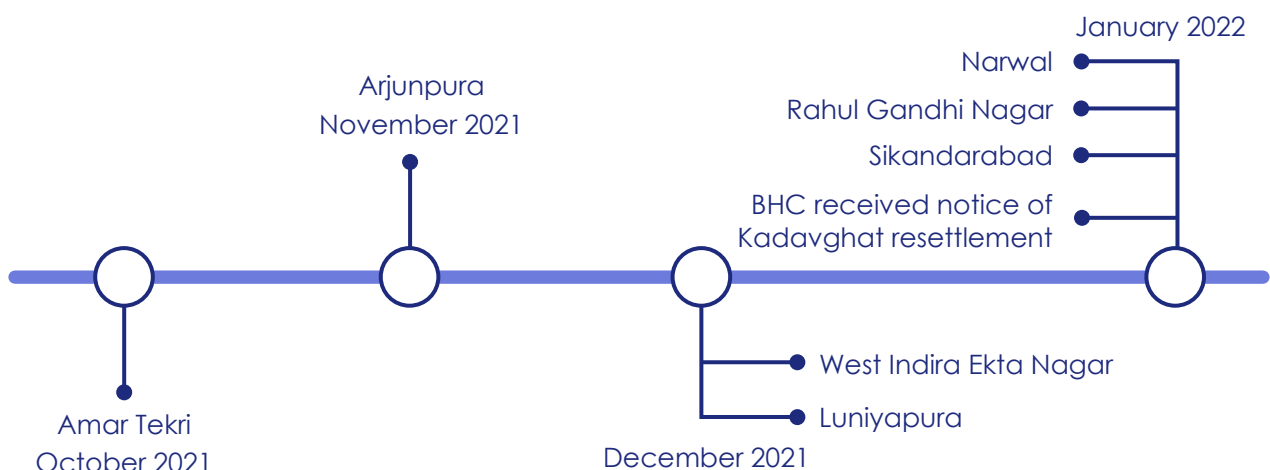
The main objectives of these data walks were to share the results of the participatory research back to each community, validate the information, and seek their views on the main issues identified and actions required to make the settlement healthier and more livable.

Kaya Kalp

This feedback helped identify interventions to pilot under Kaya Kalp, a multisector program jointly implemented by BHC and ISCDL. The Kaya Kalp pilot is multisectoral and aims to not only improve the physical environment of participating neighborhoods, but also take steps to promote healthy lifestyles, improve access to healthcare services, and encourage the local community to be actively involved in developing and maintaining the settlement on a long-term basis. BHC conducted Kaya Kalp Phase I in two neighborhoods; Phase II will be implemented by Samagra, another USAID-funded project, and ISCDL, and will expand the program to the remaining neighborhoods. Kaya Kalp activities are rooted in the seven "Coherent Actions" developed by BHC in its Healthy Indore Action Plan (Building Healthy Cities (BHC) project 2022a):

> #1: Strengthening healthy food systems for all citizens
> #2: Increasing community participation for better air quality
> #3: Improving maternal and child health through a culture of data
> #4: Making Indore a child friendly city
> #5: Creating a more diverse and equitable transport infrastructure
> #6: Exploring how to link low-income livelihoods to the circular waste economy
> #7: Sustaining municipal leadership for a healthy Indore

By using data walks as a tool of sharing the data back with the community, BHC strengthened its relationships with the community members, health workers, and community-based organizations (CBOs) working to achieve change within their communities. The data walks are an example of what community engagement looks like when everyone who is a part of the discussion is treated as an expert on their own context.

As an essential step in bringing desired change in the city, it is important to bring the data to the community and empower them to use it for their own priorities. When communities are empowered, they can put their issues in front of the city administrators and back it up with evidence.

Amar Tekri

Community Data Walk Summary

BHC organized the first data walk in Amar Tekri on October 22, 2021. Forty-five community members participated in this data walk, including women, frontline workers (FLWs), nongovernment organization (NGO) workers, and adolescent girls. They provided input on the BHC research findings and developed consensus about potential solutions to identified problems. Participants also provided valuable information to BHC regarding the relevance of the collected data. The BHC team organized the data walk so that first, the survey findings were shared with the community members, and then the priority issues which required urgent attention of the city administration were discussed.

Table 1: Community Data Walk Agenda: Amar Tekri

| Time	Discussion Topic
13:30-14:00	**Introduction of BHC and the Participatory Research Activity** Alsa Bakhtawar, BHC Project Associate
14:00-14:10	**Objectives of the Workshop** Alsa Bakhtawar, BHC Project Associate
14:10-14:25	**Discussion on Socio-economic Profile of the Community and Living Environment** Rauf Khan, BHC Consultant; Faizal Memon, Indore School of Social Work (ISSW)
14:25-14:45	**Discussion on Maternal Health and Under-Five Child Health** Alsa Bakhtawar, BHC Project Associate
14:45-15:15	**Summary of the Discussion** Alsa Bakhtawar, BHC Project Associate; Neeraj Mishra, BHC Senior Consultant

The data walk gave insight about how a question on the **knowledge about various government schemes and policies** was understood differently by the community members and the data collectors. The data suggested that less than 30 percent of the respondents were aware of the maternal and child health (MCH) schemes. However, during the data walk it was found that while the community members were not familiar with the scheme names, they were aware of the scheme services. It also reiterated the finding of BHC's systems mapping that *"when staff have limited training and awareness of the tools and procedures for implementing a social protection scheme, their willingness and ability to effectively carry out the program as designed is limited. When staff are not able to implement a program well, the enrollment and utilization of the scheme will go down"*(Building Healthy Cities (BHC) project 2018). This lack of community participation in the awareness programs run by the FLWs was also a leading factor behind the gap between **breastfeeding knowledge and practices** of the community members. As an example, almost all the women present in the discussion agreed that the baby should only be fed breastmilk for the first six months and that colostrum should be fed to the baby; but when asked about whether they applied this

knowledge in real life, there were mixed responses. This validated the finding of the quantitative survey that only 34 percent of the women were feeding colostrum to their babies and only 42 percent practiced exclusive breastfeeding for the first six months. The lack of knowledge and poor child feeding practices could also be one of the reasons why **malnutrition**, as per the FLWs and the group members, was one of the major health-related concerns in the community, especially in the poorest communities where there have been reported deaths linked to malnutrition. Parents of these children were struggling financially and often were unable to support their child's health and nutritional needs. When discussing why the data suggested otherwise – only four percent of the respondents mentioned that their child was malnourished and three percent suspected that their child was malnourished and required diagnosis – the group along with FLWs agreed that parents hesitated to report malnutrition. This lack of accurate malnutrition data makes the situation difficult to control.

The average **income** of the community was INR 9,198 (US$ 118) **and expenditure** data suggested that on average the community members were spending six percent more than their income. During the data walks, the community shared the changes that had occurred since COVID-19 became an issue. Expenditures, including expenses on health (10 percent prior to COVID-19), had increased, while income had further decreased. Residents shared that at the beginning of COVID-19 lockdowns in 2020, the tough and apathetic measures, such as forcibly taking COVID-19 patients to the quarantine center without explaining the necessary details and locking the rest of the family members at home, created a hesitancy among community members to share much information regarding their health status in the survey.

The community members reiterated their concerns regarding **water supply**, which was a well-established issue in the community; most of the complaints (44 percent) by the survey respondents were on water supply. Despite available information about citizen reporting system mechanisms (such as the CM Helpline and Indore 311 app), the community members did not feel the need to use them as most of the complaints were taken care of by the community leader. This corroborated earlier BHC survey findings about the preference for using parshads instead of the phone line or app for reporting issues in informal settlements (Faizal, Mishra, and Bachani 2020).

Despite good local policies and regulations regarding **tobacco and alcohol** use, there was a large gap in implementation. The community
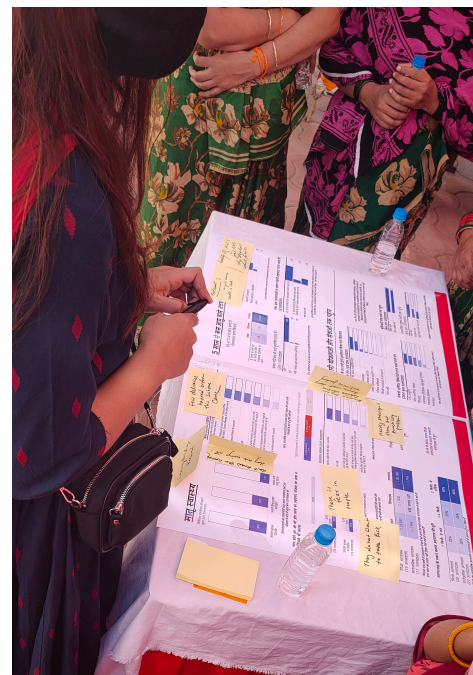
BHC shares data with community members in Amar Tekri.

members reported high use of tobacco, alcohol, and illicit drugs by young adults in the community. They also mentioned the presence of tobacco sellers around schools who were selling tobacco to children under 18 years old.

There was low awareness of programs run by the government in the community. The community members were also not aware of air pollution, its sources, and its impact on human health. This could be why, despite the Prime Minister's Ujjawala Yojana scheme, households (usually among the poorest) still used **biofuels** for cooking and other household tasks. Survey data results reported that 18 percent used biofuels for cooking and 35 percent used it to warm themselves during winter. The reasons given were that refilling the gas cylinders was a relatively large economic burden at this income level, especially for those few households earning INR 1,000 (US$ 13) per month (a gas cylinder costs around INR 700, equivalent to US$ 9); those who could afford it still preferred biofuels due to lower costs and because they were unaware of its ill health effects.

The community members reported the issue of **waterlogging,** especially during the monsoon. Thirty-nine percent of survey respondents mentioned that water entered their house during the monsoon. There was also a **conflict of job duties** between different municipal workers. For example, those who cleaned the drains did not pick up the sludge as it was not in their job description; other workers were needed to collect that waste. This resulted in piling of sludge near inspection chambers that attracted mosquitoes, flies, and other insects. This was supported by the quantitative data, which suggested that 47 percent of the respondents used mosquito repellents and 34 percent used mosquito nets to protect themselves from mosquitoes and other insects.

Priorities

This feedback, combined with the outcomes of BHC's systems mapping process, was used to pilot Kaya Kalp Phase I in Amar Tekri. BHC addressed the issues identified in Table 2, which were prioritized during the community data walk and organized by the Coherent Actions identified in BHC's Healthy Indore Action Plan. In Amar Tekri, the result of the popular vote on priorities was:

1. Coherent Action #4: Making Indore a child friendly city.
2. Coherent Action #2: Increasing community participation for better air quality.
3. Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy.

Based on the data, there were areas across Coherent Actions #1 (strengthening healthy food systems for all citizens) and #3 (improving maternal and child health through a culture of data) that also need to be addressed in order to bring this neighborhood in line with the average rates for Indore. Table 2 shows these additional areas.

Table 2: Amar Tekri Priority Issues, by Coherent Action

Ranking	Check on Priorities: Indicators from Data Walks	Value for Amar Tekri	Average Value for Indore*	Final sub-actions recommended for this neighborhood
	Coherent Action #1: Strengthening healthy food systems for all citizens			
	% of monthly income spent on food	40%	NA	
	% of households washing hands before cooking and eating	98%		
	% of households with a malnourished child	4%	Average stunting for Indore is 39%, but these indicators are not identical. Should be checked against Integrated Child Development Services (ICDS) records.	Bring the Department of Health and Department of Women and Child Development together to do a rapid survey of children suffering from malnutrition and causes of frequent relapse.
	% of neighborhood with access to a ration card	28%	68% of eligible families had a ration card (2017)	
	Number of junk food ads per 100m street length	Not assessed	8	
2	Coherent Action #2: Increasing community participation for better air quality			
	% of men age 15 years and above who use any kind of tobacco	Not assessed	36% Indore (2018) 35% Urban Madhya Pradesh (MP)	
	Average Particulate Matter 2.5 ($PM_{2.5}$) last year (2021)	46 μg/m3	Indian national threshold is 60 μg/m3	Creating green schools by training the students and teachers about the impacts of air pollution on human health and how they can improve the air they breathe.
	Key sources identified by community	Household sources: biofuels, mosquito coils, smoking		Awareness drives in the community to make them aware of the effect of air pollution on their health and reduce the use of biofuels for cooking and other purposes.
	Coherent Action #3: Improving maternal and child health through a culture of data			
	% of area that is female, reproductive age	Not assessed		
	% of pregnant or lactating women receiving MCH scheme benefits	Data in the community brief	95% (MCP card, Urban MP)	

% of women saying accredited social health activist (ASHA) is easily accessible	31%		Training and capacity building of 3A's (ASHA, Anganwadi worker (AWW) and auxiliary nurse midwife (ANM)) on safe deliveries, better nutrition, immunization, and basic healthcare services.
Does neighborhood have an urban primary health center (UPHC)?	TBD	1 UPHC per 50,000 population	
Does neighborhood have an Anganwadi center (AWC)?	Yes	1 AWC per 400-800 population, 2 AWC per 800-1,600 population, 3 AWCs per 1,600-2,400 population, thereafter in multiples of 800.	
What is completeness of the registers at Anganwadi center?	Maintaining 11 out of 15 registers, but incomplete		
1 **Coherent Action #4: Making Indore a child friendly city**			
% of monthly income spent on education	19%	NA	
% of household with an improved toilet	87%	64%	
% of homes with an open drain outside of house	19%	NA	
% of women breastfeeding exclusively for first 6 months	42%	69%	Training and capacity building of young mothers on malnutrition, breastfeeding, first 1,000 days through supportive supervision.
% of children born in a health facility	96%	99% Indore 96% Urban MP	
Average cost of delivery (INR)	16,564 (US$ 213)	As per government policy, this should be free in government hospitals, possibly with INR 2,000-4,000 (US$ 26-51) in extra fees. Private delivery costs on average INR 15,000-20,000 (US$ 193-257).	

% of schools or AWCs with a playground	TBD	53% (schools)	Developing green and safe play spaces for children. Improve the infrastructure and functioning of AWC (Update: Done under Kaya Kalp Phase I).
% of children vaccinated	96%	99% Indore average 84% Urban MP	
Coherent Action #5: Creating a more diverse and equitable transport infrastructure			
% of population getting adequate physical activity	Not assessed	76%	
Traffic injuries, total per year, all ages	Not assessed		
Number of parks in ward/colony	TBD	Indore averaged just under 1 park per ward in 2018	
Presence of usable footpaths	TBD	32% of wards had no footpaths	
3 Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy			
Average income, monthly (INR)	9,198 (US$ 118)	31,900** (US$ 410)	
% of monthly income expended	106%	NA, but should be less than 100%	
Most common occupation	Daily-wage laborer		
% of population with social protection cards - ration card	50%	TBD	
% of population with Ayushman Bharat card	35%		
% of population with BPL card	28%		
Coherent Action #7: Sustaining municipal leadership for a healthy Indore			
NA		NA	All neighborhoods will be facilitated to develop a local multisector coordination committee.
Additional actions suggested by the community			
Drug abuse among youth has appeared as a frequent problem in this neighborhood which needs attention from the city government as it is an area that falls outside of the departments BHC works with.			

*These values come from BHC's Health-at-a-Glance Profiles (HAAG), Noncommunicable Disease (NCD) Survey, National Family Health Survey (NFHS) 2020-2021 MP fact sheet, Clean Air Guide Study, or other relevant data as footnoted.
**http://www.salaryexplorer.com/salary-survey.php?loc=3528&loctype=3

Kaya Kalp Phase I Activities

- The focus of the first phase of Kaya Kalp was improving the Amar Tekri Anganwadi center (AWC) and making it a nurturing space for children under five years old. The project improved infrastructure, open spaces, and learning facilities, installed handwashing stations, and painted the outer-inner walls and floors. The Amar Tekri AWC serves 1,600 people.

Amar Tekri Anganwadi center.

- BHC is already implementing a community-led clean air initiative in the community under which two low-cost air quality monitoring sensors (LCS) were installed at two locations in the community (AWC and Amar Tekri primary school). Two community volunteers called Clean Air Guides have also been appointed to monitor the LCS data and engage the community in air pollution mitigation.

Due to time and budget constraints BHC was unable to implement the following activities. BHC recommends these activities, organized by Coherent Action, be implemented in Kaya Kalp Phase II.

Coherent Action #4: Making Indore a child friendly city
- Training and capacity building of young mothers on malnutrition, breastfeeding, and first 1,000 days through supportive supervision.
- Training and capacity building of 3A's - accredited social health activists (ASHAs), Anganwadi workers (AWWs), and auxiliary nurse midwives (ANMs) - on safe deliveries, better nutrition, immunization, and basic healthcare services.

Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy
- Create public-private partnerships for revenue generation around recyclable plastics, cements, and rubbers which can be used to create mobile pavers. Train slum dwellers interested in this work to create the pavers as well. Pavers will make up new sidewalks across the city, and can be moved and re-laid as needed when construction plans uproot a sidewalk.
- Possibly add microfinance or bank account creation support for those newly entering the workforce to help them enter the formal economy.
- Provide other jobs training to prepare low-income youth for jobs in the circular economy, including composting, bio-methanation, etc., capitalizing on Indore's leadership in this area.

- Ensure 3R's and other key recycling messaging is taught in primary schools across the city.
- Start tracking data on the number of jobs created in the circular economy/recycling sector to provide proof of concept.

Other Activities
- Bring the Department of Health and Department of Women and Child Development together to do a rapid survey of children suffering from malnutrition and causes of frequent relapse.
- Liaise with the city government to control drug abuse among all ages including school going children in the community; this is an area that falls outside of the departments that BHC worked with.

Arjunpura

Community Data Walk Summary

The second BHC data walk was organized in Arjunpura on November 30, 2021 with the support of the local community committee and ASHA. Before sharing these data with the community, BHC trained a few volunteers to facilitate the group discussion. The data walk was attended by 55 people including volunteers and the BHC team.

Table 3: Community Data Walk Agenda: Arjunpura

Time	Discussion Topic
13:30-14:00	**Introduction of BHC and the Participatory Research Activity** Neeraj Mishra, BHC Senior Consultant
14:00-14:10	**Objectives of the Workshop** Rouf Khan, BHC Consultant
14:10-14:25	**Discussion on Socio-economic Profile of the Community and Living Environment** Neeraj Mishra, BHC Senior Consultant; ISSW volunteers
14:25-14:45	**Discussion on Maternal Health and Under-Five Child Health** Rouf Khan, BHC Consultant; ISSW volunteers
14:45-15:15	**Summary of the Discussion** Neeraj Mishra, BHC Senior Consultant

Previously a slum, Arjunpura (also known as Affordable Housing Society) is a resettlement colony developed under the Government of India's Affordable Housing Scheme in 2007. The survey found that a majority of the residents (44 percent) are daily wage workers. Like many other resettlement colonies, one of the biggest problems for Arjunpura is **poor investment** from the government in **water and sanitation infrastructure**. Seventy-nine percent of the respondents mentioned hiring a private cleaner to clean inspection chambers. The residents mentioned that the water sources are at ground level; water has to be carried by residents living on the higher floors of the three-story building. No water storage tank was provided, which creates an extra burden for women who are mainly responsible for fetching water. The residents also complained about poor quality of the water, with visible impurities, which could be a reason behind cases of diarrhea and typhoid as reported by the residents. Another planning challenge reported is **toilet facilities.** The houses are so small (five by eight feet) that many people avoid using the toilets provided in the room and instead use that area as a kitchen or storage. Residents instead use public toilets, which again creates an extra challenge for the women of the community. The survey found that 73 percent of the residents used unimproved toilet facilities. Poor water and sanitation could be a leading factor behind the reported **diarrhea and typhoid** cases in the community. Some cases of malnutrition were reported among children, which differs from the quantitative survey data in which residents did not report any malnutrition cases. This implies either that residents did not know what malnutrition looks like, or that they did not think

reporting malnutrition would be helpful, further **increasing the burden of malnutrition**. Similarly, due to **waterlogging** in the community, cases of **dengue and malaria** were reported by the residents despite 80 percent of the residents using mosquito repellent.

Due to **easy access to tobacco and alcohol**, residents reported that community members consumed them in high amounts. This included adults, youth (as young as school-age children), women, and the elderly. The residents also reported consumption of illicit drugs by many community members. Alcoholism and drug abuse could also be the reason behind cases of domestic violence as well as child neglect.

Many residents reported not receiving **benefits from government schemes** because they did not have a bank account. This came up as a common issue related to government schemes. Only 40 percent of survey respondents had a ration card and 44 percent had an Ayushman Bharat card. Without these social protection cards it was impossible to access the benefits despite being very poor. Very few members had used the benefits of the Ujjawala scheme; complications in the application process were the most common reason. Some of the residents still used biofuels for cooking and were unaware of the health risks related to air pollution.

The community residents had heard of the **311 citizen reporting system app** but they had not used it much. The findings of the survey were also the same; only one percent of the respondents mentioned using the 311 app. The reasons were not having a smartphone, not knowing the process of using the system, and lack of trust in the authorities. The majority of the community members (40 percent) had never lodged a complaint through any mechanism despite the number of issues that they were facing.

Priorities

BHC was also able to pilot Kaya Kalp Phase I in this neighborhood. Through this pilot, BHC addressed some of the issues identified in Table 2, which were prioritized during the community data walk and organized by the Coherent Actions identified in BHC's Healthy Indore Action Plan. In Arjunpura, the result of the popular vote on priorities was:

1. Coherent Action #4: Making Indore a child friendly city.
2. Coherent Action #1: Strengthening healthy food systems for all citizens.
3. Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy.

Based on the data, there were areas across Coherent Action #2 (increasing community participation for better air quality) that also need to be addressed in order to bring this neighborhood in line with the average rates for Indore. Table 4 shows these additional areas.

Table 4: Arjunpura Priority Issues, by Coherent Action

Ranking	Check on Priorities: Indicators from Data Walks	Value for Arjunpura	Average Value for Indore*	Final sub-actions recommended for this neighborhood
2	Coherent Action #1: Strengthening healthy food systems for all citizens			
	% of monthly income spent on food	45%	NA	
	% of households washing hands before cooking and eating	59%		
	% of households with a malnourished child	0%	Average stunting for Indore is 39%, but these indicators are not identical. Should be checked against ICDS records.	
	% of neighborhood with access to a ration card	40%	68% of eligible families had a ration card (2017)	
	Number of junk food ads per 100m street length	Not assessed	8	Better enforcement of regulations on hygiene as well as on sale of tobacco, alcohol, and illegal junk food sellers.
	Coherent Action #2: Increasing community participation for better air quality			
	% of men age 15 years and above who use any kind of tobacco	Not assessed	36% Indore (2018) 35% Urban MP	Vendor licensing of tobacco sellers in the community for better accountability and enforcement.
	Average PM$_{2.5}$ last year (2021)	Not available for this neighborhood	Indian national threshold is 60 µg/m3	
	Key sources identified by community	TBD		
	Coherent Action #3: Improving maternal and child health through a culture of data			
	% of area that is female, reproductive age	Not assessed		
	% of pregnant or lactating women receiving MCH scheme benefits	Data in the community brief	95% (MCP card, Urban MP)	
	% of women saying ASHA is easily accessible	NA		
	Does neighborhood have a UPHC?	TBD	1 UPHC per 50,000 population	
	Does neighborhood have an Anganwadi center?	Yes	1 AWC per 400-800 population, 2 AWC per 800-1,600 population, 3 AWCs per 1,600-2,400 population, thereafter in multiples of 800.	

What is completeness of the registers at Anganwadi center?	Maintaining 11 out of 15 registers, but incomplete		
1	**Coherent Action #4: Making Indore a child friendly city**		
% of monthly income spent on education	9%	NA	
% of household with an improved toilet	25%	64%	
% of homes with an open drain outside of house	1%	NA	
% of women breastfeeding exclusively for first 6 months	15%	69%	Training and capacity building of young mothers on malnutrition, breastfeeding, first 1,000 days through supportive supervision.
% of children born in a health facility	100%	99% Indore 96% Urban MP	Training and capacity building of 3A's (ASHA, AWW and ANM) on safe deliveries, better nutrition, immunization, and basic healthcare services.
Average cost of delivery (INR)	11,639 (US$ 149)	As per government policy, this should be free in government hospitals, possibly with INR 2,000-4,000 (US$ 26-51) in extra fees. Private delivery costs on average INR 15,000-20,000 (US$ 193-257).	
% of schools or AWCs with a playground	TBD	53% (schools)	
% of children vaccinated	97%	99% Indore average 84% Urban MP	
	Coherent Action #5: Creating a more diverse and equitable transport infrastructure		
% of population getting adequate physical activity	Not assessed	76%	
Traffic injuries, total per year, all ages	Not assessed		
Number of parks in ward/colony	TBD	Indore averaged just under 1 park per ward in 2018	
Presence of usable footpaths	TBD	32% of wards had no footpaths	

3	Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy			
	Average income, monthly (INR)	7,073 (US$ 91)	31,900** (US$ 410)	Create public-private partnerships for revenue generation around recyclable plastics, cements, and rubbers which can be used to create mobile pavers (or any other innovative recycling method).
	% of monthly income expended	123%	NA, but should be less than 100%	Train slum dwellers interested in this work to create the pavers (or any other innovative recycling method) as well.
	Most common occupation	Daily-wage laborer		Providing jobs training to prepare low-income youth for jobs in the circular economy, including composting, bio-methanation, etc., capitalizing on Indore's leadership in this area.
	% of population with social protection cards - ration card	40%	TBD	Providing microfinance and bank account creation support for those newly entering workforces to help them enter formal economy.
	% of population with Ayushman Bharat card	44%		
	% of population with BPL card	50%		
	Coherent Action #7: Sustaining municipal leadership for a healthy Indore			
	NA		NA	All neighborhoods will be facilitated to develop a local multisector coordination committee.
	Additional actions suggested by the community			
	Facilitate linkages with IMC for sanitation related issues.			

*These values come from BHC's HAAG, NCD Survey, NFHS 2020-2021 MP fact sheet, Clean Air Guide Study, or other relevant data as footnoted.

**http://www.salaryexplorer.com/salary-survey.php?loc=3528&loctype=3

Kaya Kalp Phase I Activities

- In Kaya Kalp Phase I, BHC helped ISCDL adapt an underused open space in Arjunpura into a green space/park for children by recycling and reusing waste materials. The project painted 6,000 square feet of walls and floors with alphabets and other art that depicts and promotes local culture.
- Outside the community, 10,000 square feet of cycle track were also developed to promote non-motorized transport in the city and to connect the Arjunpura settlement with public transport services.

Due to time and budget constraints BHC was unable to implement the following activities. BHC recommends these activities, organized by Coherent Action, be implemented in Kaya Kalp Phase II.

Coherent Action #4: Making Indore a child friendly city
- Training and capacity building of 3A's - ASHAs, AWWs, and ANMs - on safe deliveries, better nutrition, immunization, and basic healthcare services.
- Training and capacity building of young mothers on malnutrition, breastfeeding, and first 1,000 days through supportive supervision.
- Promotion of non-motorized transport in the city.
- Implementation of Health Promoting Schools programs by the Department of Education in the remaining schools in Indore.

Coherent Action #1: Strengthening healthy food systems for all citizens
- Providing a safe, green, and legalized hawking space to local hawkers who can sell safe, healthy/organic, and staple foods to the citizens.
- Taking feedback from citizens in underserved neighborhoods on locations for healthy food hawking and the type of support needed for those who want to start such businesses.
- Promoting awareness among citizens on healthy eating in the neighborhoods where these legal hawking areas are set up.

- Better enforcement of regulations on the sale of tobacco, alcohol, and illicit drugs.
- Vendor licensing of tobacco sellers in the community for better accountability and enforcement.

Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy

- Create public-private partnerships for revenue generation around recyclable plastics, cements, and rubbers which can be used to create mobile pavers. Train slum dwellers interested in this work to create the pavers as well. Pavers will make up new sidewalks across the city, and can be moved and re-laid as needed when construction plans uproot a sidewalk.
- Possibly add microfinance or bank account creation support for those newly entering the workforce to help them enter the formal economy.
- Provide other jobs training to prepare low-income youth for jobs in the circular economy, including composting, bio-methanation, etc., capitalizing on Indore's leadership in this area.
- Ensure 3R's and other key recycling messaging is taught in primary schools across the city.
- Start tracking data on the number of jobs created in the circular economy/recycling sector to provide proof of concept.

West Indira Ekta Nagar

Community Data Walk Summary

BHC organized the third data walk in West Indira Ekta Nagar on December 14, 2021. Fifty-five community members participated in this data walk, including women, men, FLWs, NGO workers, and adolescent girls.

Table 5: Community Data Walk Agenda: West Indira Ekta Nagar

Time	Discussion Topic
13:30-14:00	**Introduction of BHC and the Participatory Research Activity** Alsa Bakhtawar, BHC Project Associate
14:00-14:10	**Objectives of the Workshop** Alsa Bakhtawar, BHC Project Associate
14:10-14:25	**Discussion on Socio-economic Profile of the Community and Living Environment** Rauf Khan, BHC Consultant
14:25-14:45	**Discussion on Maternal Health and Under-Five Child Health** Alsa Bakhtawar, BHC Project Associate
14:45-15:15	**Summary of the Discussion** Alsa Bakhtawar, BHC Project Associate; Neeraj Mishra, BHC Senior Consultant

The community members mainly discussed issues related to the living environment as they considered it the utmost priority at the moment. A nallah (open drain) that passes through the community was identified as the main culprit behind several interrelated issues. The community is located in a low-lying area; during rainy season the nallah overflows, carrying sludge and waste along with it. According to the survey findings, 16 percent of houses were filled with water from the drains during monsoon. This waste also has human feces as many houses in the area do not have a sewer connection and their fecal waste goes directly into the nallah, creating an **environmental hazard** and an **increased health burden** on the residents. This could also be a reason behind the presence of rats in the community, which 38 percent of respondents mentioned having in their homes. It has also led to **water contamination** as the water pipeline has reportedly leaked at many places leading to mixing of clean and dirty water. This can be correlated with the survey findings that 22 percent of the respondents reported dirty water in the pipes when first turned on, and 27 percent reported getting dirty water during the rainy season. The nallah is also a source of air pollution as the waste becomes dust after drying and gets into the air.

Residents reported that when they complained about the drain issue, the municipal corporation reportedly removed the excess waste from the open drain, but left the waste next to the drain. This short-term solution to a rather complex issue created more challenges as the waste disposal site became a breeding ground for insects and

mosquitoes, leading to diseases like malaria in the community. The residents also complained of skin ailments due to the poor water quality. While the respondents did not report skin ailments in the quantitative survey, this issue was discussed as part of the qualitative survey. As per the residents, children suffer the most; the **absence of green spaces** in the community forces children to play around the nallah, exposing them to insects, injuries, and air pollution. Cases of diarrhea were also reported among children, which in turn is connected with **malnutrition** cases, which were also present. As per the residents, this was one of the main priorities for which they want to see improved government services.

The location of this community is such (situated next to an industrial area and a traffic congestion point) that there are **mixed sources of air pollution**. Eight percent of survey respondents faced breathing difficulties due to industrial ash and seven percent faced this issue due to vehicular pollution. The community members reported complaining to the industrial leaders, but according to them, no action was taken. Most residents reported lodging complaints through local political leaders (49 percent), followed by the CM Helpline (15 percent); only four percent used the 311 app. Some of the community members still used biofuels for cooking (4 percent) and to keep themselves warm in winters (13 percent) mainly due to two reasons: they had not received Ujjawala scheme benefits due to documentation issues or they had a gas connection but were unable to refill due to their low income. The participants mentioned being unaware of the health risks related to air pollution. To solve this issue, BHC's Clean Air Guides organized a rally that focused on sources of air pollution and their impact on human health. The air pollution data were also shared with the community members.

Alcohol and illicit drug abuse was another pressing issue in the community, among both adults and children. Children as young as 11-15 years were reported to be drug addicts, turning to begging in order to consume drugs, and increasing the number of school dropouts as well as crime in the community. **Girls reported being harassed** by these juveniles as well as men. The community identified this as a challenge needing urgent attention from the city administration. Enforcement of regulations related to tobacco, alcohol, and illicit drugs in the city should be improved, especially in informal settlements.

As most of the community members (40 percent) are daily wage workers, they did not prefer going to government hospitals for **healthcare** as according to them, it takes one full day and leads to loss of income. Some of the reasons given for why it takes a full day is that it takes time to reach the UPHC, register and wait, and time for the consultation. In addition, if public facilities lack of lab facilities and/or medicines, patients are referred to private services anyway, necessitating another trip. Government UPHC open hours for this location are 8am to 2pm, conflicting with working hours, while private clinics are often open in the evenings. The amount

residents reported spending on private health services when they suffer from a common health ailment was less than their daily wage. According to the survey findings the community on average spent 10 percent of their income (average monthly income for this community was INR 7,682 (US$ 99)) on healthcare every month. However, for serious ailments and antenatal and postnatal care, they preferred receiving treatment from government hospitals.

There are two AWCs in the community. The government recently built a structure for the AWC. The new center has a toilet, but it was not functional and therefore was not being used. Despite reported cases of **malnutrition** in this neighborhood, it was reported that a third meal was not being provided to the children at the AWC. Awareness sessions were not being organized by the AWWs; the survey found 77 percent of respondents mentioned not receiving these benefits leading to a **lack of information about health among adolescent girls and young mothers**.

Priorities

The feedback received by the community on their data, combined with the outcomes of BHC's systems mapping process, helped to identify the priority issues in Table 6. These are organized by the Coherent Actions identified in BHC's Healthy Indore Action Plan, and have been shared with Samagra to address under Kaya Kalp Phase II. In West Indira Ekta Nagar, the result of the popular vote on priorities was:

1. Coherent Action #4: Making Indore a child friendly city.
2. Coherent Action #1: Strengthening healthy food systems for all citizens.
3. Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy.

Based on the data, there were areas across Coherent Action #2 (increasing community participation for better air quality) that also need to be addressed in order to bring this neighborhood in line with the average rates for Indore. Table 6 shows these additional areas.

Table 6: West Indira Ekta Nagar Priority Issues, by Coherent Action

Ranking	Check on Priorities: Indicators from Data Walks	Value for West Indira Ekta Nagar	Average Value for Indore*	Final sub-actions recommended for this neighborhood
2	Coherent Action #1: Strengthening healthy food systems for all citizens			
	% of monthly income spent on food	63%	Households spending over 75% of their income on food are considered very vulnerable/ food insecure; 65-75% have high food insecurity; 50-65% have medium; and < 50% are considered low risk.***	
	% of households washing hands before cooking and eating	89%		
	% of households with a malnourished child	2%	Average stunting for Indore is 39%, but these indicators are not identical. Should be checked against ICDS records.	
	% of neighborhood with access to a ration card	41%	68% of eligible families had a ration card (2017)	
	Number of junk food ads per 100m street length	Not assessed	8	• Providing a safe, green, and legalized hawking space to local hawkers who can sell safe, healthy/organic and staple foods to citizens. • Taking feedback from citizens in underserved neighborhoods on locations for healthy food hawking and the type of support needed to allow those who want to start such businesses. • Promoting awareness among citizens on healthy eating in the neighborhoods where these legal hawking areas are set up. • Better enforcement of regulations on sale of tobacco, alcohol, and illicit drugs.

			• Vendor licensing of tobacco sellers in the community for better accountability and enforcement. • Better enforcement of regulations on hygiene as well as on sale of tobacco, alcohol and illegal junk food sellers.
Coherent Action #2: Increasing community participation for better air quality			
% of men age 15 years and above who use any kind of tobacco	Not assessed	36% Indore (2018) 35% Urban MP	Vendor licensing of tobacco sellers in the community for better accountability and enforcement.
Average PM$_{2.5}$ last year (2021)	39 µg/m3	Indian national threshold is 60 µg/m3	
Key sources identified by community	Industries, traffic congestion, open drain		
Coherent Action #3: Improving maternal and child health through a culture of data			
% of area that is female, reproductive age	Not assessed		
% of pregnant or lactating women receiving MCH scheme benefits	Data in the community brief	95% (MCP card, Urban MP)	
% of women saying ASHA is easily accessible	60%		
Does neighborhood have a UPHC?	TBD	1 UPHC per 50,000 population	
Does neighborhood have an Anganwadi center?	Yes	1 AWC per 400-800 population, 2 AWC per 800-1,600 population, 3 AWCs per 1,600-2,400 population, thereafter in multiples of 800.	
What is completeness of the registers at Anganwadi center?	Maintaining all registers, partially complete data.		
1 **Coherent Action #4: Making Indore a child friendly city**			
% of monthly income spent on education	7%	NA	Implementation of the Health Promoting Schools programs by Department of Education in the remaining schools in Indore.

% of household with an improved toilet	61%	64%	
% of homes with an open drain outside of house	5%	NA	
% of women breastfeeding exclusively for first 6 months	56%	69%	Training and capacity building of young mothers on malnutrition, breastfeeding, first 1,000 days through supportive supervision.
% of children born in a health facility	90%	99% Indore 96% Urban MP	Improving citizen engagement and participation through awareness sessions with the community groups by FLWs and CBOs regarding institutional births, importance of immunization, nutrition in first 1,000 days of birth, identification of health risks, importance of sanitation and hygiene, and government services and programs on immunization, ICDS, nutrition rehabilitation centers (NRC), Right to Education (RTE) Act, etc.
Average cost of delivery (INR)	7,114 (US$ 91)	As per government policy, this should be free in government hospitals, possibly with INR 2,000-4,000 (US$ 26-51) in extra fees. Private delivery costs on average INR 15,000-20,000 (US$ 193-257).	
% of schools or AWCs with a playground	TBD	53% (schools)	Creating safe and green spaces around communities, playground facilities in schools, and pedestrian access around schools for growing children.
% of children vaccinated	100%	99% Indore average 84% Urban MP	
Coherent Action #5: Creating a more diverse and equitable transport infrastructure			
% of population getting adequate physical activity	Not assessed	76%	

Traffic injuries, total per year, all ages	Not assessed		
Number of parks in ward/colony	TBD	Indore averaged just under 1 park per ward in 2018	
Presence of usable footpaths	TBD	32% of wards had no footpaths	

3	**Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy**		
Average income, monthly (INR)	7,682 (US$ 99)	31,900** (US$ 410)	Create public-private partnerships for revenue generation around recyclable plastics, cements, and rubbers which can be used to create mobile pavers. Train slum dwellers interested in this work to create the pavers as well. Pavers will make up new sidewalks across the city, and can be moved and re-laid as needed when construction plans uproot a sidewalk.
% of monthly income expended	115%	NA, but should be less than 100%	
Most common occupation	Daily-wage laborer		• Providing other jobs training to prepare low-income youth for jobs in the circular economy, including composting, bio-methanation, etc., capitalizing on Indore's leadership in this area. • Start tracking data on jobs created in the circular economy/recycling sector to provide proof of concept.
% of population with social protection cards - ration card	41%	TBD	Add microfinance or bank account creation support for those newly entering the workforce to help them enter the formal economy.
% of population with Ayushman Bharat card	20%		
% of population with BPL card	23%		

Coherent Action #7: Sustaining municipal leadership for a healthy Indore			
	NA		NA	All neighborhoods will be facilitated to develop a local multisector coordination committee.
Additional actions suggested by the community			
	Use of illicit drugs by school age children is an issue that needs urgent attention from the city administration. This needs to be urgently addressed by higher authorities, or the situation will keep getting worse.			

*These values come from BHC's HAAG, NCD Survey, NFHS 2020-2021 MP fact sheet, Clean Air Guide Study, or other relevant data as footnoted.

**http://www.salaryexplorer.com/salary-survey.php?loc=3528&loctype=3

*** https://inddex.nutrition.tufts.edu/data4diets/indicator/household-food-expenditure-share

Proposed Kaya Kalp Phase II Activities

BHC recommends these activities, organized by Coherent Action, be implemented in Kaya Kalp Phase II.

Coherent Action #4: Making Indore a child friendly city
- Creating safe and green spaces around communities, playground facilities in schools, and pedestrian access around schools for growing children.
- Training and capacity building of 3A's - ASHAs, AWWs, and ANMs - to bridge the gap in program implementation through supportive supervision. This will create better coordination across departments regarding safe deliveries, better nutrition, immunization, and basic healthcare services.
- Improving citizen engagement and participation through awareness sessions with community groups by FLWs and CBOs regarding institutional births, importance of immunization, nutrition in first 1,000 days, identification of health risks, importance of sanitation and hygiene, and government services and programs on immunization, Integrated Child Development Services (ICDS), nutrition rehabilitation centers (NRC), Right to Education (RTE) Act, etc.
- Promotion of non-motorized transport in the city.
- Implementation of Health Promoting Schools programs by the Department of Education in the remaining schools in Indore.

Coherent Action #1: Strengthening healthy food systems for all citizens
- Providing a safe, green, and legalized hawking space to local hawkers who can sell safe, healthy/organic, and staple foods to the citizens.
- Taking feedback from citizens in underserved neighborhoods on locations for healthy food hawking and the type of support needed for those who want to start such businesses.
- Promoting awareness among citizens on healthy eating in the neighborhoods where these legal hawking areas are set up.
- Better enforcement of regulations on the sale of tobacco, alcohol, and illicit drugs.
- Vendor licensing of tobacco sellers in the community for better accountability and enforcement.

Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy
- Create public-private partnerships for revenue generation around recyclable plastics, cements, and rubbers which can be used to create mobile pavers. Train slum dwellers interested in this work to create the pavers as well. Pavers will make up new sidewalks across the city, and can be moved and re-laid as needed when construction plans uproot a sidewalk.
- Possibly add microfinance or bank account creation support for those newly entering the workforce to help them enter the formal economy.

- Provide other jobs training to prepare low-income youth for jobs in the circular economy, including composting, bio-methanation, etc., capitalizing on Indore's leadership in this area.
- Ensure 3R's and other key recycling messaging is taught in primary schools across the city.
- Start tracking data on the number of jobs created in the circular economy/recycling sector to provide proof of concept.

Other Activities

In addition, the following issues were brought up during the data walks which require coordination with other city sectors.

- The use of illicit drugs by school age children is an issue that needs urgent attention from the city administration. This needs to be urgently addressed by higher authorities, or the situation will continue to get worse.
- The presence of an open drain in the community and issues related to it require long term sustainable solutions.

Luniyapura

Community Data Walk Summary

BHC organized the fourth data walk in Luniyapura on December 15, 2021. Forty-seven community members participated in this data walk, including women, men, FLWs, NGO workers, and adolescent girls.

Table 7: Community Data Walk Agenda: Luniyapura

Time	Discussion Topic
13:30-14:00	**Introduction of BHC and the Participatory Research Activity** Damodar Bachani, BHC Deputy Project Director
14:00-14:10	**Objectives of the Workshop** Damodar Bachani, BHC Deputy Project Director
14:10-14:25	**Discussion on Socio-economic Profile of the Community and Living Environment** Rauf Khan, BHC Consultant
14:25-14:45	**Discussion on Maternal Health and Under-Five Child Health** Alsa Bakhtawar, BHC Project Associate
14:45-15:15	**Summary of the Discussion** Alsa Bakhtawar, BHC Project Associate; Neeraj Mishra, BHC Senior Consultant

ICDS is one of the most important schemes by the government of India to improve the **health and nutritional status of children under 6 years of age and women**. AWCs are the very foundation of this scheme. Without a properly functional AWC, this scheme will not yield any results. This is the case with Luniyapura; the AWC was temporarily located in a temple and was then relocated far away from the community, making it difficult for families and children to access. Community members reported that they were receiving little benefit from the AWC due to this distance. This aligns with the survey findings that 32 percent of the respondents were getting their child vaccinated at private clinics, and 11 percent reported that their child was not vaccinated as per the schedule.

Apart from the poor nutrition system, there is **no health facility** in the community. Community members reported suffering from a range of illnesses, including respiratory diseases, heart diseases, and cancer. Deaths due to cancer were reported by the community members. The residents also identified poor water quality as a reason behind many illnesses. Eighty-seven percent of survey respondents reported getting dirty water and 44 percent mentioned that there were insects in the water they got from the pipeline. Community members reported that the water was not potable and had caused more health issues among those who were already sick. They mentioned reporting it to authorities but said that no action was taken. However, the survey found that 41 percent of the respondents had never lodged a complaint and only 11 percent used the 311 app for filing complaints. A wide range of illnesses have created extra health expenditures for residents, compounding the loss of income due to COVID-19 that the majority of the households also suffered. Average monthly income in this

community was INR 11,333 (US$ 145). The **government health insurance scheme (Ayushman Bharat)** was also not helpful due to various systemic issues. Only 47 percent of the respondents had an Ayushman Bharat card. Aurobindo Hospital (a private hospital in Indore) reportedly denied providing the benefits of the scheme to a few households in the community.

Lack of employment came up as the most pressing concern among the women's group of the community as 69 percent of the community residents are daily wage workers who faced a loss of income during COVID-19. Community members mentioned that COVID-19 had impacted their livelihood a lot, making it difficult for them to manage their necessities. Without any higher education and lack of employment skills, they only managed to get jobs with very low pay. They requested skill development training in line with their educational status, which ranges from no schooling to graduation. This training could help them in fetching higher paying jobs which in turn could raise their socio-economic status in the long run. BHC organized a livelihood training on stitching cloth bags for women from all 8 settlements, and a few women from Luniyapura participated (Building Healthy Cities project 2021).

There is no **green space/playground** for children in the community. They reportedly play outside the community, which increases the risk of injuries as well as respiratory diseases since it is a heavy traffic zone/congestion point with no traffic management. Due to traffic congestion and a crematorium nearby, air pollution levels are also high around the community, posing more threats to the health of an already at-risk community. However, no respondents to the survey reported faced breathing difficulties due to industrial and vehicular pollution. This differs completely from the feedback received during the data walk and air quality data from nearby air quality sensors. This could be because the community members have become used to the polluted air.

Priorities

The feedback received by the community on their data, combined with the outcomes of BHC's systems mapping process, helped to identify the priority issues in Table 8. These are organized by the Coherent Actions identified in BHC's Healthy Indore Action Plan, and have been shared with Samagra to address under Kaya Kalp Phase II. In Luniyapura, the result of the popular vote on priorities was:

1. Coherent Action #4: Making Indore a child friendly city.
2. Coherent Action #2: Increasing community participation for better air quality.
3. Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy.

Based on the data, there were areas across Coherent Actions #3 (improving maternal and child health through a culture of data) and #5 (creating a more diverse and equitable transport infrastructure) that also need to be addressed in order to bring this neighborhood in line with the average rates for Indore. Table 8 shows these additional areas.

Table 8: Luniyapura Priority Issues, by Coherent Action

Ranking	Check on Priorities: Indicators from Data Walks	Value for Luniyapura	Average Value for Indore*	Final sub-actions recommended for this neighborhood
	Coherent Action #1: Strengthening healthy food systems for all citizens			
	% of monthly income spent on food	34%	Households spending over 75% of their income on food are considered very vulnerable/ food insecure; 65-75% have high food insecurity; 50-65% have medium; and < 50% are considered low risk.***	
	% of households washing hands before cooking and eating	88%		
	% of households with a malnourished child	1%	Average stunting for Indore is 39%, but these indicators are not identical. Should be checked against ICDS records.	
	% of neighborhood with access to a ration card	50%	68% of eligible families had a ration card (2017)	
	Number of junk food ads per 100m street length	Not assessed	8	
2	Coherent Action #2: Increasing community participation for better air quality			
	% of men age 15 years and above who use any kind of tobacco	Not assessed	36% Indore (2018) 35% Urban MP	Awareness drives in the community to make them aware of the effect of air pollution on their health and reduce the use of biofuels for cooking and other purposes.
	Average PM$_{2.5}$ last year (2021)	54 µg/m3	Indian national threshold is 60 µg/m3	Effective traffic regulation mechanism at heavy traffic zones like Luniyapura.
	Key sources identified by community	Traffic, crematorium, commercial sources		Creating green schools by training the students and teachers about the impacts of air pollution on human health and how they can improve the air they breathe.

Coherent Action #3: Improving maternal and child health through a culture of data			
% of area that is female, reproductive age	Not assessed		
% of pregnant or lactating women receiving MCH scheme benefits	Data in the community brief	95% (MCP card, Urban MP)	
% of women saying ASHA is easily accessible	62%		
Does neighborhood have a UPHC?	TBD	1 UPHC per 50,000 population	
Does neighborhood have an Anganwadi center?	Yes but far from the community, not within	1 AWC per 400-800 population, 2 AWC per 800-1,600 population, 3 AWCs per 1,600-2,400 population, thereafter in multiples of 800.	Provision of a community space for the development of Anganwadi and health centers by the city administration.
What is completeness of the registers at Anganwadi center?	Maintaining 12 out of 15 registers, incomplete data.		

1	Coherent Action #4: Making Indore a child friendly city			
	% of monthly income spent on education	9%	NA	
	% of household with an improved toilet	86%	64%	
	% of homes with an open drain outside of house	12%	NA	
	% of women breastfeeding exclusively for first 6 months	37%	69%	Training and capacity building of young mothers on malnutrition, breastfeeding, first 1,000 days through supportive supervision.
	% of children born in a health facility	93%	99% Indore 96% Urban MP	Improving citizen engagement and participation through awareness sessions with the community groups by FLWs and CBOs regarding institutional births, importance of immunization, nutrition in first 1,000 days, identification of health risks, importance of sanitation and hygiene, and government services and programs on immunization, ICDS, NRC, RTE Act, etc.

Average cost of delivery (INR)	6,864 (US$ 88)	As per government policy, this should be free in government hospitals, possibly with INR 2,000-4,000 (US$ 26-51) in extra fees. Private delivery costs on average INR 15,000-20,000 (US$ 193-257).	
% of schools or AWCs with a playground	TBD	53% (schools)	Creating safe and green spaces around communities, playground facilities in schools, and pedestrian access around schools for growing children.
% of children vaccinated	89%	99% Indore average 84% Urban MP	
Coherent Action #5: Creating a more diverse and equitable transport infrastructure			
% of population getting adequate physical activity	Not assessed	76%	
Traffic injuries, total per year, all ages	Not assessed		Enforcement of traffic rules for motor vehicles, staying off sidewalks and cycling tracks, and other public safety enforcement especially to ensure safety of women and children.
Number of parks in ward/colony	TBD	Indore averaged just under 1 park per ward in 2018	
Presence of usable footpaths	TBD	32% of wards had no footpaths	
3 **Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy**			
Average income, monthly (INR)	11,333 (US$ 145)	31,900** (US$ 410)	
% of monthly income expended	85%	NA, but should be less than 100%	
Most common occupation	Daily-wage laborer		Education based skill development of the women and girls in the community. This can be taken up by the city under National Urban Livelihood Mission.
% of population with social protection cards - ration card	50%	TBD	

% of population with Ayushman Bharat card	47%		Probing into why the hospitals are denying benefits to the residents under Ayushman Bharat.
% of population with BPL card	43%		
Coherent Action #7: Sustaining municipal leadership for a healthy Indore			
NA		NA	All neighborhoods will be facilitated to develop a local multisector coordination committee.

*These values come from BHC's HAAG, NCD Survey, NFHS 2020-2021 MP fact sheet, Clean Air Guide Study, or other relevant data as footnoted.

**http://www.salaryexplorer.com/salary-survey.php?loc=3528&loctype=3

*** https://inddex.nutrition.tufts.edu/data4diets/indicator/household-food-expenditure-share

Proposed Kaya Kalp Phase II Activities

BHC recommends these activities, organized by Coherent Action, be implemented in Kaya Kalp Phase II.

Coherent Action #4: Making Indore a child friendly city

- Creating safe and green spaces around communities, playground facilities in schools, and pedestrian access around schools for growing children.
- Training and capacity building of 3A's - ASHAs, AWWs, and ANMs - to bridge the gap in program implementation through supportive supervision. This will create better coordination across departments regarding safe deliveries, better nutrition, immunization, and basic healthcare services.
- Improving citizen engagement and participation through awareness sessions with community groups by FLWs and CBOs regarding institutional births, importance of immunization, nutrition in first 1,000 days, identification of health risks, importance of sanitation and hygiene, and government services and programs on immunization, ICDS, NRC, RTE Act, etc.
- Promotion of non-motorized transport in the city.
- Implementation of Health Promoting Schools programs by the Department of Education in the remaining schools in Indore.

Coherent Action #2: Increasing community participation for better air quality

- Making citizens aware of traffic norms and the impact on their city's environment so that they themselves can support the city by complying with regulations, e.g., citizens getting their vehicles checked every three months to ensure that emissions are within permissible levels.
- Creating pathways for quality data sharing which could be used for surveillance, management, and development of policies.
- Generating awareness in the community about green transport, 3-storied plantation, traffic norms, Pollution Under Control (PUC) measurements, etc.
- Encouraging green/sustainable transport in the city. This could be done at the individual level (walking, cycling) as well as community level (carpooling, using compressed natural gas (CNG) vehicles, etc.)
- Creating green schools by training the students and teachers about the impacts of air pollution on human health and how they can support improving the air they breathe. Training community workers as Clean Air Guides to measure air pollution, identify sources of emissions, explore mitigation efforts, and make citizens aware of the effect of air pollution on their health.
- Generating community level data. Installing low-cost air quality sensors in the community and building their capacity for data collection, so that they are aware of the increase in air pollution levels, the impact it can have on their health, and what precautions they should take to reduce exposure to air pollutants. The

collected data would be linked to the Integrated Command & Control Centre (ICCC) for multisector data access.
- Conduct a study that compares electric vehicles with CNGs based on sustainability, durability, efficacy, and impact on the environment.

Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy
- Create public-private partnerships for revenue generation around recyclable plastics, cements, and rubbers which can be used to create mobile pavers. Train slum dwellers interested in this work to create the pavers as well. Pavers will make up new sidewalks across the city, and can be moved and re-laid as needed when construction plans uproot a sidewalk.
- Possibly add microfinance or bank account creation support for those newly entering the workforce to help them enter the formal economy.
- Provide other jobs training to prepare low-income youth for jobs in the circular economy, including composting, bio-methanation, etc., capitalizing on Indore's leadership in this area.
- Ensure 3R's and other key recycling messaging is taught in primary schools across the city.
- Start tracking data on the number of jobs created in the circular economy/recycling sector to provide proof of concept.

Other Activities
In addition, the following issues were brought up during the data walks which require coordination with other city sectors.

- Provision of a community space for the development of Anganwadi and health centers by the city administration.
- Probing into why the hospitals are denying benefits to the residents under Ayushman Bharat.

Narwal

Community Data Walk Summary

BHC organized the fifth data walk in Narwal on January 6, 2022. The Narwal settlement is in an industrial area of the city. Fifty-one community members participated in this data walk, including women, men, FLWs, NGO workers, and adolescent girls.

Table 9: Community Data Walk Agenda: Narwal

Time	Discussion Topic
13:00-13:15	**Introduction of BHC and Objectives of the Workshop** Dr. Damodar, BHC Deputy Project Director
13:15-14:00	**Interactions with the Community on Main Issues** Dr. Damodar, BHC Deputy Project Director
14:00-14:30	**Discussion on Socio-economic Profile of the Community and Living Environment** Rauf Khan, BHC Consultant; Faizal Memon, ISSW
14:30-15:00	**Discussion on Maternal Health and Under- Five Child Health** Prabhat Jha and Neeraj Mishra, Samagra Project
15:00-15:30	**Air Quality Issues Discussion Followed by Awareness Rally** Dr. Minakshi Kar and Dr. R.K. Sharma, ISSW

Being an industrial area, **wastewater** generated from not only households, but also from the neighboring factories creates environmental issues needing urgent action. "Sewerage system does not cover all the household and streets in this settlement. Poor drainage in open drains leads to collection of stagnant water particularly in low lying parts of the settlement," said one resident.

On the other hand, the municipal **solid waste management** system is working effectively in the area. Garbage collection vehicles regularly collect household waste. Though vehicles cannot reach narrow lanes, sanitary workers collect the garbage from such lanes and place it in the vehicle, according to one resident.

One major issue faced by the community is **water supply**. The piped water supply comes from Narmada canal. Nearly 20 percent of homes did not have a piped water connection; they instead used a neighbor's connection or public taps. Seventy-six percent of survey respondents reported that they had dirty water and 23 percent reported having kidney or other stone problems that they related with poor drinking water. There are some borings to draw ground water, but a general complaint was that the quality of water from both piped water and underground water sources was not good. Residents were of the view that wastewater from industries affects ground water collected through bore wells. This community also reported facing water scarcity in summer as 24 percent reported they did not get enough water supply during summers.

Access to the **public transport system** was not a problem as public buses are available at a convenient distance. Road safety was also not perceived as an issue here. **Built infrastructure** for healthy living was lacking; there is no park or green space for children to play. The condition of lanes was also not good, and there are no separate pathways for pedestrians or cyclists in the lanes through the settlement. BHC could not find an open government space nearby where a park could be built. In the absence of any such facility, some children have developed the habit of hanging out and smoking on the premises of the school and the AWC.

Due to a large number of factories, **air quality** is an issue here. In the survey 34 percent of respondents mentioned having breathing difficulties due to industrial smoke. The participants mentioned that they had a LPG connection, however 28 percent of the community members used biofuels for cooking and 38 percent used them to warm themselves in winter. Open burning of solid waste was not prevalent in this community. There are two air quality sensors in this area, and they showed poorer air quality compared to other areas of the city. The average $PM_{2.5}$ for the last year was 70 µg/m3, higher than the Indian national threshold of 60 µg/m3. The highest reading in the same year was 254 µg/m3 in December 2021.

The nearest **public health facility** (CHC Banganga) is about 3 kilometers away from the settlement and services are not frequently sought by the residents due to distance and cost of travel. On average, residents spent nine percent of their monthly income (which is on average INR 12,736 (US$ 164)) on healthcare. ANMs from Sudama Nagar visit this area. There is one ASHA who has worked in this area for 3 years and residents were aware of her services. Due to the lack of convenient healthcare services close by, the residents mentioned their preferences for two private clinics and one private Aurbindo hospital. There was unanimous demand from the community to open a primary health center as early as possible to reduce out of pocket costs.

There is one primary school in this community, and a middle school at a convenient distance. An **AWC** is located adjacent to the primary school. Fifty-two percent of survey respondents mentioned that they had not received benefits from the AWW. Infrastructure of this center is very poor and requires immediate attention. For example, there is no electricity in the center. There is one AWW and one assistant (sahayika) and both were very enthusiastic workers. Some space was available within the premises that could be developed as a green space, including play equipment. Samagra and BHC teams agreed to develop this center under Kaya Kalp Phase II.

Some residents raised the issue of the lack of a community hall. "There is no community hall in the settlement for any ceremonies like marriage," said one resident. "We have no choice but to hire facility available at an *Ashram* of a Trust (an NGO) with heavy charges (INR 11,000 per day, approximately US$ 150) which is very high for us," he

added. The government should develop a community center in the area or a direct trust to subsidize the cost for poor families.

Priorities

The feedback received by the community on their data, combined with the outcomes of BHC's systems mapping process, helped to identify the priority issues in Table 10. These are organized by the Coherent Actions identified in BHC's Healthy Indore Action Plan, and have been shared with Samagra to address under Kaya Kalp Phase II. In Narwal, the result of the popular vote on priorities was:

1. Coherent Action #4: Making Indore a child friendly city.
2. Coherent Action #2: Increasing community participation for better air quality.
3. Coherent Action #3: Improving maternal and child health through a culture of data.

Based on the data, there were areas across Coherent Actions #1 (strengthening healthy food systems for all citizens), #3 (improving maternal and child health through a culture of data), #4 (making Indore a child friendly city), and #6 (exploring how to link low-income livelihoods to the circular waste economy) that also need to be addressed in order to bring this neighborhood in line with the average rates for Indore. Table 10 shows these additional areas.

Table 10: Narwal Priority Issues, by Coherent Action

Ranking	Check on Priorities: Indicators from Data Walks	Value for Narwal	Average Value for Indore*	Final sub-actions recommended for this neighborhood
	Coherent Action #1: Strengthening healthy food systems for all citizens			
	% of monthly income spent on food	28%	Households spending over 75% of their income on food are considered very vulnerable/ food insecure; 65-75% have high food insecurity; 50-65% have medium; and < 50% are considered low risk.***	
	% of households washing hands before cooking and eating	99%		
	% of households with a malnourished child	3%	Average stunting for Indore is 39%, but these indicators are not identical. Should be checked against ICDS records.	
	% of neighborhood with access to a ration card	52%	68% of eligible families had a ration card (2017)	
	Number of junk food ads per 100m street length	Not assessed	8	
2	Coherent Action #2: Increasing community participation for better air quality			
	% of men age 15 years and above who use any kind of tobacco	Not assessed	36% Indore (2018) 35% Urban MP	
	Average PM$_{2.5}$ last year (2021)	70 µg/m3	Indian national threshold is 60 µg/m3	Training community workers as Clean Air Guides to measure air pollution, identify sources of emissions, explore mitigation efforts, and make citizens aware of the effect of air pollution on their health.
	Key sources identified by community	Factories, biofuels		Creating green schools by training the students and teachers about the impacts of air pollution on human health and how they can improve the air they breathe.
3	Coherent Action #3: Improving maternal and child health through a culture of data			
	% of area that is female, reproductive age	Not assessed		

% of pregnant or lactating women receiving MCH scheme benefits	Data in the community brief	95% (MCP card, Urban MP)	
% of women saying ASHA is easily accessible	63%		Training and capacity building of 3A's (ASHA, AWW and ANM) on safe deliveries, better nutrition, immunization, and basic healthcare services.
Does neighborhood have a UPHC?	No	1 UPHC per 50,000 population	Work with Chief Medical & Health Officer (CM&HO) on sanctioning a primary health center (out of 60 new being identified).
Does neighborhood have an Anganwadi center?	Yes	1 AWC per 400-800 population, 2 AWC per 800-1,600 population, 3 AWCs per 1,600-2,400 population, thereafter in multiples of 800.	
What is completeness of the registers at Anganwadi center?	Maintaining all registers, partially complete.		
1	**Coherent Action #4: Making Indore a child friendly city**		
% of monthly income spent on education	8%	NA	
% of household with an improved toilet	87%	64%	
% of homes with an open drain outside of house	14%	NA	
% of women breastfeeding exclusively for first 6 months	66%	69%	Training and capacity building of young mothers on malnutrition, breastfeeding, first 1,000 days through supportive supervision.
% of children born in a health facility	87%	99% Indore 96% Urban MP	
Average cost of delivery (INR)	2,364 (US$ 30)	As per government policy, this should be free in government hospitals, possibly with INR 2,000-4,000 (US$ 26-51) in extra fees. Private delivery costs on average INR 15,000-20,000 (US$ 193-257).	

% of schools or AWCs with a playground	TBD	53% (schools)	Developing green and safe play spaces for children. Improve the infrastructure and functioning of AWC (Update: Done under Kaya Kalp Phase I).
% of children vaccinated	96%	99% Indore average 84% Urban MP	
Coherent Action #5: Creating a more diverse and equitable transport infrastructure			
% of population getting adequate physical activity	Not assessed	76%	
Traffic injuries, total per year, all ages	Not assessed		
Number of parks in ward/colony	TBD	Indore averaged just under 1 park per ward in 2018	
Presence of usable footpaths	TBD	32% of wards had no footpaths	
Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy			
Average income, monthly (INR)	12,736 (US$ 164)	31,900** (US$ 410)	
% of monthly income expended	139%	NA, but should be less than 100%	
Most common occupation	Daily-wage worker		
% of population with social protection cards - ration card	52%	TBD	
% of population with Ayushman Bharat card	20%		
% of population with BPL card	39%		
Coherent Action #7: Sustaining municipal leadership for a healthy Indore			
NA		NA	All neighborhoods will be facilitated to develop a local multisector coordination committee.
Additional actions suggested by the community			
Work with Madhya Pradesh Pollution Control Board (MPPCB) to test water quality of samples from piped and boring water.			

*These values come from BHC's HAAG, NCD Survey, NFHS 2020-2021 MP fact sheet, Clean Air Guide Study, or other relevant data as footnoted.
**http://www.salaryexplorer.com/salary-survey.php?loc=3528&loctype=3
*** https://inddex.nutrition.tufts.edu/data4diets/indicator/household-food-expenditure-share

Proposed Kaya Kalp Phase II Activities

BHC recommends these activities, organized by Coherent Action, be implemented in Kaya Kalp Phase II.

Coherent Action #4: Making Indore a child friendly city

- Creating safe and green spaces around communities, playground facilities in schools, and pedestrian access around schools for growing children.
- Training and capacity building of 3A's - ASHAs, AWWs, and ANMs - to bridge the gap in program implementation through supportive supervision. This will create better coordination across departments regarding safe deliveries, better nutrition, immunization, and basic healthcare services.
- Improving citizen engagement and participation through awareness sessions with community groups by FLWs and CBOs regarding institutional births, importance of immunization, nutrition in first 1,000 days, identification of health risks, importance of sanitation and hygiene, and government services and programs on immunization, ICDS, NRC, RTE Act, etc.
- Promotion of non-motorized transport in the city.
- Implementation of Health Promoting Schools programs by the Department of Education in the remaining schools in Indore.

Coherent Action #2: Increasing community participation for better air quality

- Making citizens aware of traffic norms and the impact on their city's environment so that they themselves can support the city by complying with regulations, e.g., citizens getting their vehicles checked every three months to ensure that emissions are within permissible levels.
- Creating pathways for quality data sharing which could be used for surveillance, management, and development of policies.
- Generating awareness in the community about green transport, 3-storied plantation, traffic norms, PUC measurements, etc.
- Encouraging green/sustainable transport in the city. This could be done at the individual level (walking, cycling) as well as community level (carpooling, using CNG vehicles, etc.)
- Creating green schools by training the students and teachers about the impacts of air pollution on human health and how they can support improving the air they breathe. Training community workers as Clean Air Guides to measure air pollution, identify sources of emissions, explore mitigation efforts, and make citizens aware of the effect of air pollution on their health.
- Generating community level data. Installing low-cost air quality sensors in the community and building their capacity for data collection, so that they are aware of the increase in air pollution levels, the impact it can have on their health, and what precautions they should take to reduce exposure to air pollutants. The collected data would be linked to the ICCC for multisector data access.

- Conduct a study that compares electric vehicles with CNGs based on sustainability, durability, efficacy, and impact on the environment.

Coherent Action #3: Improving maternal and child health through a culture of data
- Training and capacity building of the staff on data collection, analysis, and application use by MGM College and Nursing College student volunteers.
- Meetings between stakeholders to come to a mutual agreement on the software/data backbone to allow data integration.
- National/state level decision to allow data integration into ICCC.
- Appointing a nodal officer in the city to facilitate data sharing between sectors until it is integrated with ICCC.
- Use existing technology/user-led design to improve technology to fit health workers' needs.
- Strengthen data privacy guidelines to safeguard individual privacy.
- Training on data integration for ICCC.

Other Activities
In addition, BHC will work with the local and city governments to address the following issues that were brought up in the data walk:

- Work with Chief Medical & Health Officer (CM&HO) on sanctioning a primary health center (out of 60 new ones being identified).
- Work with Madhya Pradesh Pollution Control Board (MPPCB) to conduct water quality tests on samples drawn from piped as well as boring water.
- Work with Indore Municipal Corporation (IMC) to address wastewater drainage issues.

Rahul Gandhi Nagar

Community Data Walk Summary

BHC organized the sixth data walk in Rahul Gandhi Nagar on January 7, 2022. This settlement was established about 20 years ago. Some of the residents who have been living here since the beginning informed us that they were moved from slums and allotted land plots on a lease for 30 years. Many have constructed their house on these plots. It is thus a resettlement colony. There are many factories and offices nearby where most of the men work. Many women are engaged as maids in nearby apartments.

Forty-five community members participated in this data walk, including women, men, FLWs, NGO workers, and adolescent girls. Additional participants included Manjit Garg and Uttkarsh Dongre, Clean Air Guides; Keshav Bishnoi, a student from ISSW; and Mr. Apoorv Trivedi, who works for two NGOs, AAS and Child Rights and You, and extended his support for any interventions in this settlement.

Table 11: Community Data Walk Agenda: Rahul Gandhi Nagar

Time	Discussion Topic
12:30-12:45	**Introduction of BHC and Objectives of the Workshop** Dr. Damodar, BHC Deputy Project Director
12:45-13:30	**Interactions with the Community on Main Issues** Dr. Damodar, BHC Deputy Project Director
13:30-14:00	**Discussion on Socio-economic Profile of the Community and Living Environment** Rauf Khan, BHC Consultant
14:00-14:30	**Discussion on Maternal Health and Under-Five Child Health** Prabhat Jha and Neeraj Mishra, Samagra Project
14:30-15:00	**Air Quality Issues** Ms. Manjit Garg, Clean Air Guide

Rapid urbanization and urban mobility came up during discussion with community members. There is no **access to the public transport system** in or near the settlement. The residents mentioned that to reach the nearest public bus stop, they paid INR 50 (US$ 0.60) one way, which is very high for the low-income population who are living on an average income of INR 9,284 (US$ 119). Along with this, there are no separate pathways for pedestrians or cyclists in the settlement. Under the Smart Cities program, a city is required to build efficient urban mobility and public transportation by creating walkable localities, as well as promoting a variety of transport options. However, there is no clear guideline for developing a sustainable public transportation system.

Poor access to public transport also affects the health seeking behavior of the residents. The nearest **public health facility** (PHC Scheme 78, Ravidas Square) is about three kilometers away from the settlement and due to lack of public transport, the residents sometimes paid INR 100 (US$ 1) to reach the facility. Residents therefore did not frequently seek services from this facility. There is one ASHA who has worked in this area for many years and residents were aware of her services. However, according to the survey this community had the highest percentage of home delivery cases (11 percent). Data walk discussions suggested this percentage was because the respondents in the survey were older and gave birth years ago. Due to a lack of convenient public healthcare services, the residents mentioned their preferences for private clinics. BHC enquired about the population of this settlement and other settlements in the vicinity, as a new urban primary health center's (UPHC) coverage needs to be about 30,000 people. Setting up a new UPHC here would save out-of-pocket expenditures on healthcare, as on average the residents spent seven percent of their monthly income on healthcare. The same is true for education; there is one **primary school** in the settlement. For higher education students need to go to Scheme 78. Poor access to public transport and no walking and cycling pathways may prove to be risky for young students who have to travel to their schools.

During the discussion it was also found that most of the challenges are being addressed by the government through a very linear approach, when they instead require a systemic understanding. For example, there is no piped **water supply** in the settlement. Seventy-seven percent of the survey respondents used bore wells as their primary water source, but the water from this source was polluted, possibly from seepage from the sewerage system. The situation was worse in summer as water tables are low; 26 percent of respondents mentioned facing water shortages during summer. People reported walking some distance to fetch drinking water from another neighborhood. To solve this complex issue, the government simply supplies water through tankers whenever there is a need. An AWW said that about five years back, a reverse osmosis machine was installed by IMC, but it worked for only three years and is no longer functional. The impact of poor water quality is highlighted by the increased incidence of **waterborne diseases** like diarrhea and typhoid. Sixty-four percent of survey respondents complained about water services through various grievance redressal mechanisms, the most popular being through political leaders/municipal councilors (67 percent), followed by the 311 app (18 percent).

The **sewerage system** does not cover all the households and streets in this settlement; 11 percent of the houses had an open drain outside, and poor drainage of open drains led to collection of stagnant water. The situation worsens in the rainy season. Vehicles under the city's **solid waste management** system come regularly to collect solid waste. The participants mentioned that they paid INR 60 (US$ 0.80) per month for this service. Earlier this fee was collected in installments but now they are required to pay a lump

sum of INR 720 (US$ 9) for one year, which is problematic. BHC inquired whether residents were aware of the scheme where families can deposit plastic waste and based on the weight, receive a rebate for solid waste collection fees. Neither the ASHA nor AWWs were aware about this scheme. For this purpose, residents need to be given "plastic waste cards."

Although Rahul Gandhi Nagar is a resettlement colony, there is a lack of **built infrastructure** and there is no park or green space for children to play. The condition of the roads was also bad. Due to a large number of factories, **air quality** is an issue here; 15 percent of survey respondents reported breathing difficulties due to industrial smoke. In addition, the participants mentioned that the Ujjwala scheme was not being implemented here. Only a few participants had LPG gas connections, while all other residents mainly used biofuels for cooking. This differs from the survey findings in which only 14 percent of residents mentioned using biofuels for cooking. However, 21 percent mentioned using wood and coal to warm themselves during winter.

There are two **Anganwadi centers** and both have an AWW and assistants. All of them attended the event. One of the centers functions from a rented space. There were some issues around attendance of children under five years old. The AWW mentioned that people did not send children regularly and resisted anthropometric measurements for assessing nutritional status of children. There are a few cases of **malnutrition** in this settlement, a finding that was validated through a study of the nutrition status of children under five years old that BHC conducted in this community (Building Healthy Cities project 2022b). The survey found eight percent of respondents mentioned having a malnourished child in the family and six percent suspected that their child was malnourished. Immunization coverage was quite high here (98 percent) and people were satisfied with this service. The majority of the children (83 percent) were vaccinated at the AWC.

During discussion with the community, the BHC team identified other issues. It was observed that the public was not aware of many **government schemes.** Many residents did not have an Aadhar Card (18 percent) or Ration Card (76 percent). There was no outlet of Public Distribution System in the settlement. It was suggested that a camp be organized to make people aware of these schemes and help citizens to get important cards/documents to access services. BHC identified a number of families who were facing financial hardship for reasons including **mental illness**, inability to access **old age pensions**, and lack of regular income after the death of the main earner. Other families inquired about how to get birth certificates for children born at home so they could attend school, and access to skills training for older but still underage children to help them to earn income while working from home.

Priorities

The feedback received by the community on their data, combined with the outcomes of BHC's systems mapping process, helped to identify the priority issues in Table 12. These are organized by the Coherent Actions identified in BHC's Healthy Indore Action Plan, and have been shared with Samagra to address under Kaya Kalp Phase II. In Rahul Gandhi Nagar, the result of the popular vote on priorities was:

1. Coherent Action #4: Making Indore a child friendly city.
2. Coherent Action #3: Improving maternal and child health through a culture of data.
3. Coherent Action #2: Increasing community participation for better air quality.

Based on the data, there were areas across Coherent Actions #2 (increasing community participation for better air quality) and #3 (improving maternal and child health through a culture of data) that also need to be addressed in order to bring this neighborhood in line with the average rates for Indore. Table 12 shows these additional areas.

Table 12: Rahul Gandhi Nagar Priority Issues, by Coherent Action

Ranking	Check on Priorities: Indicators from Data Walks	Value for Rahul Gandhi Nagar	Average Value for Indore*	Final sub-actions recommended for this neighborhood
	Coherent Action #1: Strengthening healthy food systems for all citizens			
	% of monthly income spent on food	32%	Households spending over 75% of their income on food are considered very vulnerable/ food insecure; 65-75% have high food insecurity; 50-65% have medium; and < 50% are considered low risk.***	
	% of households washing hands before cooking and eating	96%		
	% of households with a malnourished child	8%	Average stunting for Indore is 39%, but these indicators are not identical. Should be checked against ICDS records.	Bring Department of Health and Department of Women and Child Development together to do a rapid survey of children suffering from malnutrition and causes of frequent relapse.
	% of neighborhood with access to a ration card	24%	68% of eligible families had a ration card (2017)	
	Number of junk food ads per 100m street length	Not assessed	8	
3	Coherent Action #2: Increasing community participation for better air quality			
	% of men age 15 years and above who use any kind of tobacco	Not assessed	36% Indore (2018) 35% Urban MP	
	Average PM$_{2.5}$ last year (2021)	Not available for this neighborhood	Indian national threshold is 60 µg/m3	Creating green schools by training the students and teachers about the impacts of air pollution on human health and how they can improve the air they breathe.
	Key sources identified by community	Traffic, crematorium, commercial sources		Awareness drives in the community to make them aware of the effect of air pollution on their health and reduce the use of biofuels for cooking and other purposes.

2	Coherent Action #3: Improving maternal and child health through a culture of data			
	% of area that is female, reproductive age	Not assessed		
	% of pregnant or lactating women receiving MCH scheme benefits	Data in the community brief	95% (MCP card, Urban MP)	
	% of women saying ASHA is easily accessible	65%	NA	
	Does neighborhood have a UPHC?		1 UPHC per 50,000 population	Explore setting up a UPHC to cover this and neighboring settlements (out of 60 new centers sanctioned for Indore city).
	Does neighborhood have an Anganwadi center?	Yes	1 AWC per 400-800 population, 2 AWC per 800-1,600 population, 3 AWCs per 1,600-2,400 population, thereafter in multiples of 800.	
	What is completeness of the registers at Anganwadi center?	Poor data quality, incomplete data in AWC 1, good data quality in AWC 2		Training and capacity building of the staff on data collection, analysis, and application use by MGM College and Nursing College student volunteers.
1	Coherent Action #4: Making Indore a child friendly city			
	% of monthly income spent on education	14%	NA	
	% of household with an improved toilet	89%	64%	
	% of homes with an open drain outside of house	11%	NA	
	% of women breastfeeding exclusively for first 6 months	69%	69%	Training and capacity building of young mothers on malnutrition, breastfeeding, first 1,000 days through supportive supervision.
	% of children born in a health facility	89%	99% Indore 96% Urban MP	Training and capacity building of 3A's (ASHA, AWW and ANM) on safe deliveries, better nutrition, immunization, and basic healthcare services.

Average cost of delivery (INR)	3,741 (US$ 48)	As per government policy, this should be free in government hospitals, possibly with INR 2,000-4,000 (US$ 26-51) in extra fees. Private delivery costs on average INR 15,000-20,000 (US$ 193-257).	
% of schools or AWCs with a playground	TBD	53% (schools)	Developing green and safe play spaces for children. Improve the infrastructure and functioning of AWC.
% of children vaccinated	98%	99% Indore average 84% Urban MP	
Coherent Action #5: Creating a more diverse and equitable transport infrastructure			
% of population getting adequate physical activity	Not assessed	76%	
Traffic injuries, total per year, all ages	Not assessed		
Number of parks in ward/colony	TBD	Indore averaged just under 1 park per ward in 2018	
Presence of usable footpaths	TBD	32% of wards had no footpaths	
Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy			
Average income, monthly (INR)	9,284 (US$ 119)	31,900** (US$ 410)	
% of monthly income expended	70%	NA, but should be less than 100%	
Most common occupation	Daily-wage laborer		
% of population with social protection cards - ration card	24%	TBD	
% of population with Ayushman Bharat card	20%		
% of population with BPL card	31%		

Coherent Action #7: Sustaining municipal leadership for a healthy Indore			
NA		NA	All neighborhoods will be facilitated to develop a local multisector coordination committee.
Additional actions suggested by the community			
Provision of safe drinking water is the top priority. The city administration needs to address it systemically instead of providing solutions which prove to be inefficient in the long term.			
Repair existing AWC and explore any government accommodation for a second AWC.			
Organize awareness camps to make residents aware of various government welfare schemes and help them access services (e.g., LPG connection under Ujjwala, old age pension, Aadhar card, ration card, etc.).			

*These values come from BHC's HAAG, NCD Survey, NFHS 2020-2021 MP fact sheet, Clean Air Guide Study, or other relevant data as footnoted.

**http://www.salaryexplorer.com/salary-survey.php?loc=3528&loctype=3

*** https://inddex.nutrition.tufts.edu/data4diets/indicator/household-food-expenditure-share

Proposed Kaya Kalp Phase II Activities

BHC recommends these activities, organized by Coherent Action, be implemented in Kaya Kalp Phase II.

Coherent Action #4: Making Indore a child friendly city
- Creating safe and green spaces around communities, playground facilities in schools, and pedestrian access around schools for growing children.
- Training and capacity building of 3A's - ASHAs, AWWs, and ANMs - to bridge the gap in program implementation through supportive supervision. This will create better coordination across departments regarding safe deliveries, better nutrition, immunization, and basic healthcare services.
- Improving citizen engagement and participation through awareness sessions with community groups by FLWs and CBOs regarding institutional births, importance of immunization, nutrition in first 1,000 days, identification of health risks, importance of sanitation and hygiene, and government services and programs on immunization, ICDS, NRC, RTE Act, etc.
- Promotion of non-motorized transport in the city.
- Implementation of Health Promoting Schools programs by the Department of Education in the remaining schools in Indore.

Coherent Action #3: Improving maternal and child health through a culture of data
- Training and capacity building of the staff on data collection, analysis, and application use by MGM College and Nursing College student volunteers.
- Meetings between stakeholders to come to a mutual agreement on the software/data backbone to allow data integration.
- National/state level decision to allow data integration into ICCC.
- Appointing a nodal officer in the city to facilitate data sharing between sectors until it is integrated with ICCC.
- Use existing technology/user-led design to improve technology to fit health workers' needs.
- Strengthen data privacy guidelines to safeguard individual privacy.
- Training on data integration for ICCC.

Coherent Action #2: Increasing community participation for better air quality
- Making citizens aware of traffic norms and the impact on their city's environment so that they themselves can support the city by complying with regulations, e.g., citizens getting their vehicles checked every three months to ensure that emissions are within permissible levels.
- Creating pathways for quality data sharing which could be used for surveillance, management, and development of policies.
- Generating awareness in the community about green transport, 3-storied plantation, traffic norms, PUC measurements, etc.

- Encouraging green/sustainable transport in the city. This could be done at the individual level (walking, cycling) as well as community level (carpooling, using CNG vehicles, etc.)
- Creating green schools by training the students and teachers about the impacts of air pollution on human health and how they can support improving the air they breathe. Training community workers as Clean Air Guides to measure air pollution, identify sources of emissions, explore mitigation efforts, and make citizens aware of the effect of air pollution on their health.
- Generating community level data. Installing low-cost air quality sensors in the community and building their capacity for data collection, so that they are aware of the increase in air pollution levels, the impact it can have on their health, and what precautions they should take to reduce exposure to air pollutants. The collected data would be linked to the ICCC for multisector data access.
- Conduct a study that compares electric vehicles with CNGs based on sustainability, durability, efficacy, and impact on the environment.

Sikandarabad

Community Data Walk Summary

BHC organized the seventh data walk in Sikandarabad on January 13, 2021 with the support of the ASHA and the local CBO. Forty-four community members participated in this data walk, including women, FLWs, NGO workers, and adolescent girls.

Table 13: Community Data Walk Agenda: Sikandarabad

Time	Discussion Topic
13:30-14:00	**Introduction of BHC and the Participatory Research Activity** Alsa Bakhtawar, BHC Project Associate
14:00-14:10	**Objectives of the Workshop** Alsa Bakhtawar, BHC Project Associate
14:10-14:25	**Discussion on Socio-economic Profile of the Community and Living Environment** Rauf Khan, BHC Consultant
14:25-14:45	**Discussion on Maternal Health and Under-Five Child Health** Alsa Bakhtawar, BHC Project Associate
14:45-15:15	**Summary of the Discussion** Alsa Bakhtawar, BHC Project Associate

In addition to being one of the communities where BHC conducted participatory research, Sikandarabad slum is also where BHC mapped the journey of residents struggling with an open drain and a makeshift bridge (Building Healthy Cities project 2020). A large **open drain** passes through the center of the community and directly next to the homes of 11 percent of the survey respondents. This came out as a major cause of concern among the residents during the data walk. The open drain has created a list of inter-related issues that the community members are facing (as shown in the figure below). Four main problems related to open drains were: (1) waterlogging especially during the rainy season; (2) waste and fecal disposal into the open drain by the community members; (3) risk of injuries to children and adults; (3) and air pollution due to buildup of toxic gases. Twenty-seven percent of the respondents mentioned that water from the open drain entered their home during the rainy season. Twenty-six percent mentioned using a mosquito repellant and the same percent used mosquito nets as the open drain is a breeding ground for insects.

Further discussion revealed the health risks related to each issue. The community faced a range of illnesses including malaria, dengue, respiratory diseases, and typhoid. The deaths of two children due to falling into the drain were documented in the BHC journey map. The issue of the open drain persisted even after years of complaints by the community members, and despite improvements made by the city. Nearly half (49 percent) of the respondents complained about the sanitation issues, while another 40
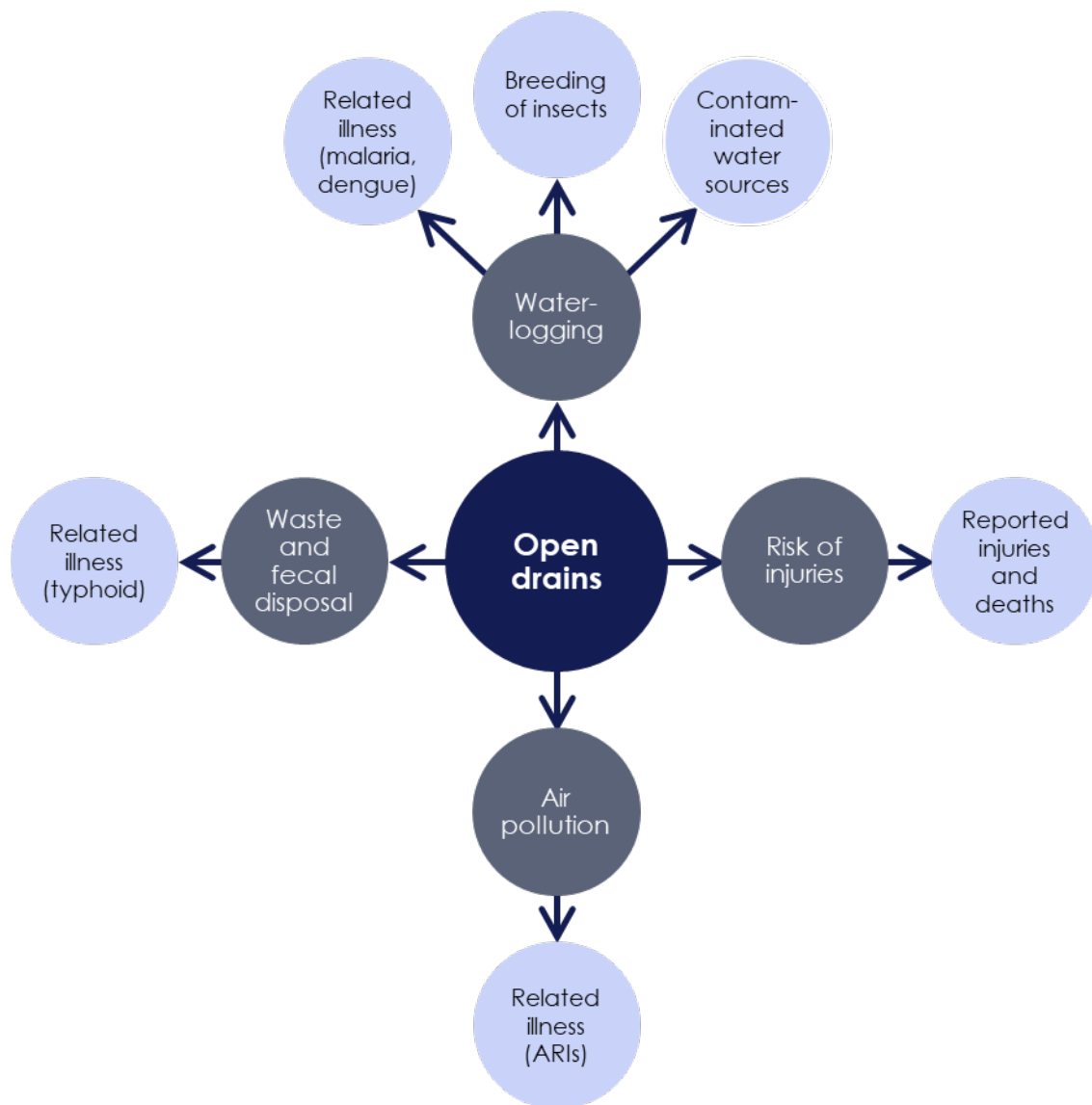
percent had never lodged a complained despite these problems. The majority filed complaints through municipal councilors (41 percent), while only five percent of respondents mentioned using the 311 app. During the data walk, BHC organized a small session on how to use the 311 app for the community members. The government started the construction of a sewer line to solve this issue but according to the community members that plan failed, so the construction was stopped midway. A list of short-term solutions (e.g., sieving the contaminated water through a cloth to remove impurities and then treating it with alum) are applied by the community members whenever the situation becomes worse.

Almost half of the households in the community do not have **access to the piped water** supply; this validates the survey finding that only 54 percent of the respondents had a piped water supply to their homes. This creates an additional burden on women who are primarily responsible for carrying water in heavy vessels as the water supply is intermittent. Because of this, the majority of the households stored water in large

containers as vessels. Coupled with **water contamination** from the open drain, this has created a challenge that is affecting the sustainability of this urban settlement.

The nearest **public health facility** (Malharganj Hospital) is located at a distance of five kilometers from the community. Because of the distance the community members reported accessing services from a private clinic (in case of minor illnesses) and from MY Hospital or PC Sethi Hospital for births. The survey found that 51 percent of the women opted for private hospitals and 49 percent went to public hospitals to give birth. There was a reported lack of confidence in Malharganj Hospital – residents said that the facilities were inadequate and staff were negligent toward the health of pregnant women and newborns. Mothers reported that they were discharged within three hours of giving birth and the community members reported infant deaths in previous years.

Young mothers reported having a proper diet during their pregnancy and lactation period. Though the survey found that there was a lack of **adequate child feeding practices** in the community with only 38 percent of women practicing exclusive breastfeed for six months and only 44 percent feeding colostrum to the child, the community members disagreed with it. This could be because those who attended the data walk had better knowledge on the topic compared to others; there are some pockets of people with the lowest-income within the settlement who did not attend this data walk.

The community is very overcrowded, and there is no available green space or park in the neighborhood for children to play. The existing infrastructure of the community is very old and is deteriorating due to poor construction practices, and little or no maintenance and rehabilitation activities due to limited financial resources. Along with this, there is a lack of proper **access to the public transport system** in or near the settlement. The community members pay a fee to use privately run auto rickshaws to reach the nearest bus stop. Along with this, there are no separate pathways for pedestrians or cyclists in the settlement. This also creates issues for schoolchildren, as there is no primary school in the community and parents must drop their children at school. The absence of pedestrian or cycle pathways increases the risk of accidents.

Finally, the last issue that the community raised was about the **use of tobacco** in the community. Tobacco is easily available in shops around the community who reportedly sell it to children under 18 years old. These children often go to buy it for elders but many women mentioned that is how they developed the habit of consuming tobacco. There were no cases of alcoholism and substance abuse mentioned in the community.

The BHC team asked community members about issues related to **air pollution**. They reported a foul smell emitted by the open drain, the presence of skin ailments, and respiratory diseases. However, no one was aware of the effect of the foul smell on the air they breathe, or the health risks of air pollution. Two Clean Air Guides, Ms. Shalini and

Mr. Jugal Kishore Chouhan, provided information about air pollution, including explaining the air quality index and the various health risks associated with air pollution. The community members mentioned that this information was very helpful for them as now they are able to identify the health issues that they have suffered over the years.

Priorities

The feedback received by the community on their data, combined with the outcomes of BHC's systems mapping process, helped to identify the priority issues in Table 14. These are organized by the Coherent Actions identified in BHC's Healthy Indore Action Plan, and have been shared with Samagra to address under Kaya Kalp Phase II. In Sikandarabad, the result of the popular vote on priorities was:

1. Coherent Action #4: Making Indore a child friendly city.
2. Coherent Action #1: Strengthening healthy food systems for all citizens.
3. Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy.

Based on the data, there were areas across Coherent Actions #2 (increasing community participation for better air quality) and #3 (improving maternal and child health through a culture of data) that also need to be addressed in order to bring this neighborhood in line with the average rates for Indore. Table 14 shows these additional areas.

Table 14: Sikandarabad Priority Issues, by Coherent Action

Ranking	Check on Priorities: Indicators from Data Walks	Value for Sikandarabad	Average Value for Indore*	Final sub-actions recommended for this neighborhood
2	Coherent Action #1: Strengthening healthy food systems for all citizens			
	% of monthly income spent on food	76%	Households spending over 75% of their income on food are considered very vulnerable/ food insecure; 65-75% have high food insecurity; 50-65% have medium; and < 50% are considered low risk.***	
	% of households washing hands before cooking and eating	98%		
	% of households with a malnourished child	1%	Average stunting for Indore is 39%, but these indicators are not identical. Should be checked against ICDS records.	
	% of neighborhood with access to a ration card	28%	68% of eligible families had a ration card (2017)	
	Number of junk food ads per 100m street length	Not assessed	8	Better enforcement of regulations on sale of tobacco. Vendor licensing of tobacco sellers in the community for better accountability and enforcement.
	Coherent Action #2: Increasing community participation for better air quality			
	% of men age 15 years and above who use any kind of tobacco	Not assessed	36% Indore (2018) 35% Urban MP	
	Average PM$_{2.5}$ last year (2021)	Not available for this neighborhood	Indian national threshold is 60 µg/m3	Creating green schools by training the students and teachers about the impacts of air pollution on human health and how they can improve the air they breathe.
	Key sources identified by community	Household sources- biofuels, mosquito coils, smoking, open drains		Awareness drives in the community to make them aware of the effect of air pollution on their health and reduce the use of biofuels for cooking and other purposes.

Coherent Action #3: Improving maternal and child health through a culture of data			
% of area that is female, reproductive age	Not assessed		
% of pregnant or lactating women receiving MCH scheme benefits	Data in the community brief	95% (MCP card, Urban MP)	
% of women saying ASHA is easily accessible	60%		
Does neighborhood have a UPHC?	No	1 UPHC per 50,000 population	Work with CM&HO on sanctioning a primary health center in the community.
Does neighborhood have an Anganwadi center?	Yes	1 AWC per 400-800 population, 2 AWC per 800-1,600 population, 3 AWCs per 1,600-2,400 population, thereafter in multiples of 800.	Training and capacity building of 3A's (ASHA, AWW and ANM) on safe deliveries, better nutrition, immunization, and basic healthcare services.
What is completeness of the registers at Anganwadi center?	Partially complete data		

1	Coherent Action #4: Making Indore a child friendly city			
	% of monthly income spent on education	20%	NA	
	% of household with an improved toilet	90%	64%	
	% of homes with an open drain outside of house	10%	NA	
	% of women breastfeeding exclusively for first 6 months	38%	69%	Training and capacity building of young mothers on malnutrition, breastfeeding, first 1,000 days through supportive supervision.
	% of children born in a health facility	98%	99% Indore 96% Urban MP	Improving citizen engagement and participation through awareness sessions with the community groups by FLWs and CBOs regarding institutional births, importance of immunization, nutrition in first 1,000 days, identification of health risks, importance of sanitation and hygiene, and government services and programs on immunization, ICDS, NRC, RTE Act, etc.

Average cost of delivery (INR)	12,088 (US$ 155)	As per government policy, this should be free in government hospitals, possibly with INR 2,000-4,000 (US$ 26-51) in extra fees. Private delivery costs on average INR 15,000-20,000 (US$ 193-257).	
% of schools or AWCs with a playground	TBD	53% (schools)	Developing green and safe play spaces for children. Improve the infrastructure and functioning of AWC (Update: Done under Kaya Kalp Phase I).
% of children vaccinated	98%	99% Indore average 84% Urban MP	
Coherent Action #5: Creating a more diverse and equitable transport infrastructure			
% of population getting adequate physical activity	Not assessed	76%	
Traffic injuries, total per year, all ages	Not assessed		Enforcement of traffic rules for motor vehicles, staying off sidewalks and cycling tracks, and other public safety enforcement especially to ensure safety of women and children.
Number of parks in ward/colony	TBD	Indore averaged just under 1 park per ward in 2018	
Presence of usable footpaths	TBD	32% of wards had no footpaths	Developing cycling and pedestrian infrastructure between the settlement and key points where a diverse income range of citizens can use them as a viable alternative to motor vehicles.
3 **Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy**			
Average income, monthly (INR)	6,370 (US$ 82)	31,900** (US$ 410)	
% of monthly income expended	162%	NA, but should be less than 100%	

Most common occupation	Self-employed		Education based skill development of the women and girls in the community. This can be taken up by the city under National Urban Livelihood Mission.
% of population with social protection cards - ration card	28%	TBD	
% of population with Ayushman Bharat card	20%		
% of population with BPL card	28%		
Coherent Action #7: Sustaining municipal leadership for a healthy Indore			
NA		NA	All neighborhoods will be facilitated to develop a local multisector coordination committee.
Additional actions suggested by the community			
Work with MPPCB to conduct water quality test on samples from piped and boring water.			
Work with IMC on addressing wastewater drainage issue.			

*These values come from BHC's HAAG, NCD Survey, NFHS 2020-2021 MP fact sheet, Clean Air Guide Study, or other relevant data as footnoted.

**http://www.salaryexplorer.com/salary-survey.php?loc=3528&loctype=3

*** https://inddex.nutrition.tufts.edu/data4diets/indicator/household-food-expenditure-share

Proposed Kaya Kalp Phase II Activities

BHC recommends these activities, organized by Coherent Action, be implemented in Kaya Kalp Phase II.

Coherent Action #4: Making Indore a child friendly city

- Creating safe and green spaces around communities, playground facilities in schools, and pedestrian access around schools for growing children.
- Training and capacity building of 3A's - ASHAs, AWWs, and ANMs - to bridge the gap in program implementation through supportive supervision. This will create better coordination across departments regarding safe deliveries, better nutrition, immunization, and basic healthcare services.
- Improving citizen engagement and participation through awareness sessions with community groups by FLWs and CBOs regarding institutional births, importance of immunization, nutrition in first 1,000 days, identification of health risks, importance of sanitation and hygiene, and government services and programs on immunization, ICDS, NRC, RTE Act, etc.
- Promotion of non-motorized transport in the city.
- Implementation of Health Promoting Schools programs by the Department of Education in the remaining schools in Indore.

Coherent Action #1: Strengthening healthy food systems for all citizens

- Providing a safe, green, and legalized hawking space to local hawkers who can sell safe, healthy/organic, and staple foods to the citizens.
- Taking feedback from citizens in underserved neighborhoods on locations for healthy food hawking and the type of support needed for those who want to start such businesses.
- Promoting awareness among citizens on healthy eating in the neighborhoods where these legal hawking areas are set up.
- Better enforcement of regulations on the sale of tobacco, alcohol, and illicit drugs.
- Vendor licensing of tobacco sellers in the community for better accountability and enforcement.

Coherent Action #6: Exploring how to link low-income livelihoods to the circular waste economy

- Create public-private partnerships for revenue generation around recyclable plastics, cements, and rubbers which can be used to create mobile pavers. Train slum dwellers interested in this work to create the pavers as well. Pavers will make up new sidewalks across the city, and can be moved and re-laid as needed when construction plans uproot a sidewalk.
- Possibly add microfinance or bank account creation support for those newly entering the workforce to help them enter the formal economy.

- Provide other jobs training to prepare low-income youth for jobs in the circular economy, including composting, bio-methanation, etc., capitalizing on Indore's leadership in this area.
- Ensure 3R's and other key recycling messaging is taught in primary schools across the city.

Other Activities

In addition, the following issues were brought up in the data walks which require coordination with other city sectors:

- Work with CM&HO on sanctioning a primary health center (out of 60 new ones being identified).
- Work with MPPCB to conduct water quality tests on samples drawn from piped as well as boring water.
- Work with IMC to address wastewater drainage issues.

Kadavghat

An eighth neighborhood, Kadavghat, took part in BHC's participatory research study. However, when the team followed up to organize a data walk, we learned that the residents were scheduled to be moved to a new neighborhood. Because of this pending displacement, the neighborhood understandably could not take part in the data walks, nor could they be a part of Kaya Kalp Phase II. As such, BHC consolidated and shared the participatory research data for this neighborhood, but did not hold a data walk.

Detailed findings for Kadavghat from the participatory research activity are provided in Annex 2.

References

Bakhtawar, Alsa, Bachani Damodar, Bhawna Sharma, Rakshit Samya, Malik Sayan, Khosla Renu, Amanda Pomeroy-Stevens, and Neeraj Mishra. 2022. "Indore Participatory Research Report: Phase II Quantitative Results." Building Healthy Cities (BHC) project.

Building Healthy Cities (BHC) project. 2018. "BHC Indore Theory of Context Systems Map." Kumu. December 2018. http://embed.kumu.io/e5e636071ec5753cfe65113efd6f40b6.

———. 2020. "The Forgotten Bridge: Indore Journey Map Series 2020." Arlington, VA: Building Healthy Cities (BHC) project. https://www.jsi.com/resource/building-healthy-cities-indore-journey-map-series-the-forgotten-bridge/.

———. 2021. "Indore Workshop Report: Livelihoods Training." Arlington, VA: Building Healthy Cities (BHC) project. https://www.jsi.com/resource/indore-workshop-report-livelihoods-training/.

———. 2022a. "Proposed Multisector Healthy City Action Plan: Indore." Arlington, VA: Building Healthy Cities (BHC) project. https://www.jsi.com/resource/building-healthy-cites-healthy-indore-action-plan/.

———. 2022b. "Status of Child Nutrition and Community Nutrition Support Systems: Indore, India." Arlington, VA: Building Healthy Cities (BHC) project. https://www.jsi.com/resource/status-of-child-nutrition-and-community-nutrition-support-systems-indore-india/.

Faizal, Memon, Neeraj Mishra, and Damodar Bachani. 2020. "Assessment Report on Citizen Reporting Systems in Indore City." Arlington, VA: Building Healthy Cities (BHC) project. https://www.jsi.com/resource/building-healthy-cities-assessment-report-on-citizen-reporting-systems-in-indore-city/.

Sharma, Bhawna, Rakshit Samya, Malik Sayan, Mishra Neeraj, Bachani Damodar, and Khosla Renu. 2020. "Indore Participatory Research Report: Phase I Qualitative Results." Building Healthy Cities (BHC) project. https://publications.jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=24085&lid=3.

Annex 1: Participants

Designation	Number of Participants
Data Walk 1: Amar Tekri	
Community members (women)	43
Community members (men)	1
FLWs	1
Total	*45*
Data Walk 2: Arjun Pura	
Community members (women)	31
Community members (men)	13
Volunteers/CBOs	9
BHC team	2
Total	*55*
Data Walk 3: West Indira Ekta Nagar	
Community members (women)	43
Community members (men)	10
FLWs	2
Total	*55*
Data Walk 4: Luniyapura	
Community members (women)	41
Community members (men)	6
Total	*47*
Data Walk 5: Narwal	
Community members (women)	28
Community members (men)	23
Clean Air Guides	2
BHC team	2
Development partners	3
Total	*58*
Data Walk 6: Rahul Gandhi Nagar	
Community members (women)	40
Community members (men)	5
Clean Air Guides	2

BHC team	2
Development partners	3
Total	*52*
Data Walk 7: Sikandarabad	
Community members (women)	40
FLWs	4
BHC team	2
Clean Air Guides	3
Basix	1
Total	*50*

Annex 2: Data Walk Briefs

This annex provides the materials shared during the data walks. The survey methodology and data walk instructions below were shared with participants. The Community Data Briefs shared with each neighborhood are on subsequent pages.

Survey methodology details shared with data walk participants

- Implementing agency: Centre for Urban and Regional Excellence (CURE)
- CBO partner: IDSS
- Time of data collection: Data was collected in three phases in October-November 2020.
- Data collection tools: Three separate theme based questionnaires were developed, one for each phase of data collection.
- This survey is the third stage of the study (see figure below), following a qualitative inquiry conducted in the same eight urban communities (slum and non-slum settlements) between November 2019-January 2020. The findings from the qualitative data guided the structure and tools for this survey.
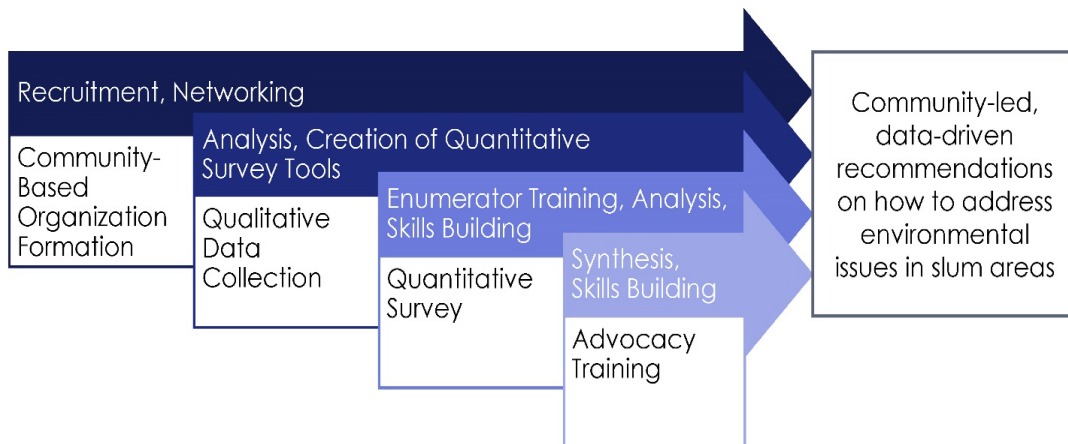
Data walk directions

Four thematic stations: (1) living environment; (2) illness; (3) maternal and child health; (4) access to services.

Follow-up questions for the community:

- Are there findings that do not seem right to you?
- Which findings seem most important to your life?
- How do you want your community to use these data to make change?
- How can city government support you and your community to make these changes?

Facilitator instructions:

- Break into smaller groups. Each group will spend 15 minutes at each station.
- Help the community members write down any questions or comments they want on sticky notes, and leave them on the corresponding poster board.

Community brief
Amar Tekri, Indore

Participatory research: 2020-21

Sample size: 204 households

Introduction to Amar Tekri

Amar Tekri is situated in the western part of the city core, adjacent to Malwa Mill area. Most of the residents are migrants from the state of Maharashtra. The community has one Primary school, 2 Anganwadi centres and one open space available. A nallah passes from the two sides of the community.

Number of households	434
Population	2284
Infrastructure	**Water Supply:** Narmada pipe line and open wells **Sanitation:** All households have access to toilets. **Solid Waste Management:** Poor waste management in the north part of the community
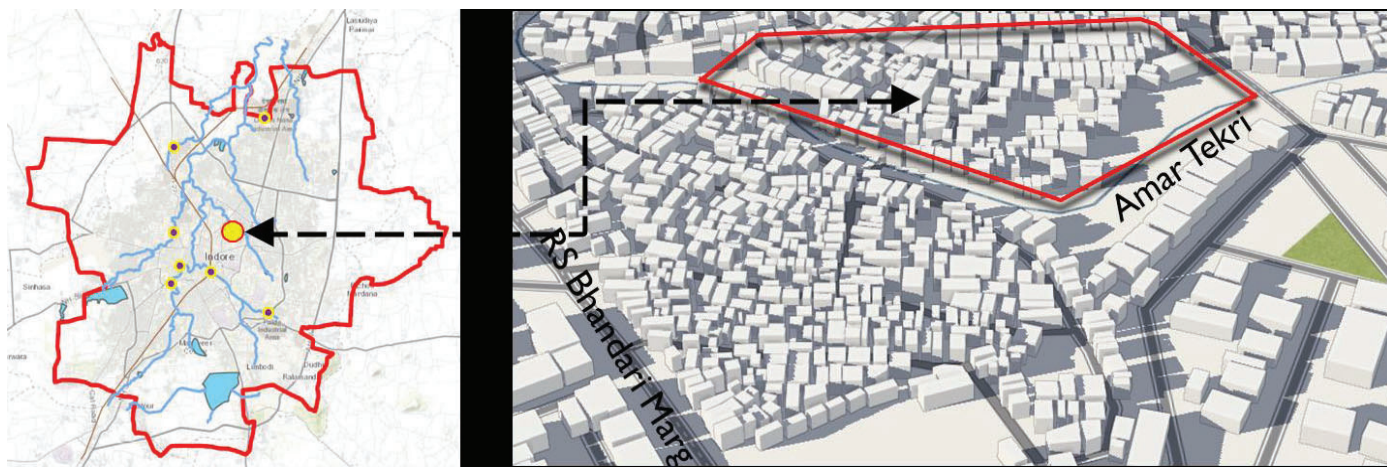
Location map and layout plan of Amar Tekri.

Observations

Socio-economic profile of the community
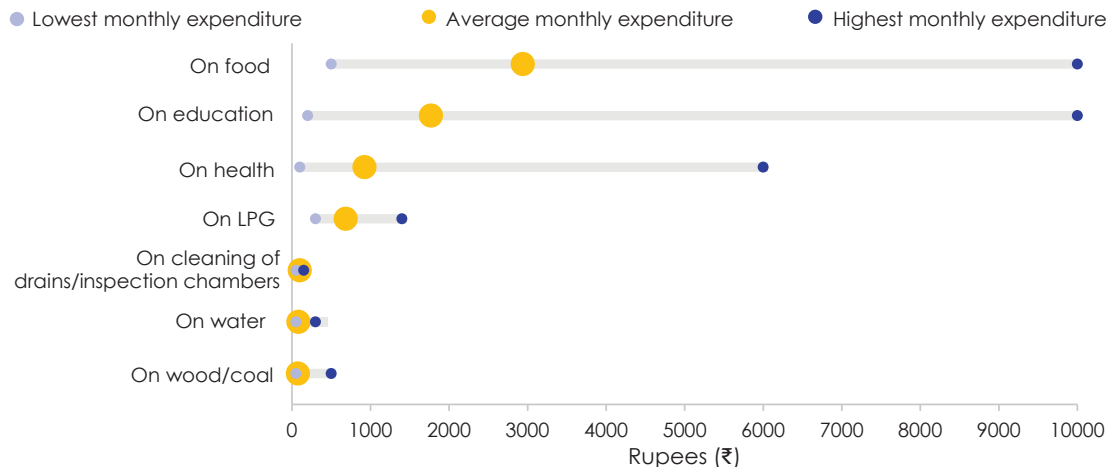
Total monthly expenditure

● Lowest monthly expenditure ● Average monthly expenditure ● Highest monthly expenditure

On average, households spend more money on food every month than other resources.

Types of jobs held by slum inhabitants (101 respondents)

Daily-wage labourer	50%
Domestic worker	22%
Self-employed	9%
Driver	6%
Painter	3%
Private Job	3%
Housewife	2%
Cook	2%
Beautician	1%
Army personnel	1%
Tailor	1%

Most slum inhabitants work as daily-wage laborers or domestic workers

	Average	Lowest	Highest
Age	38 years	18 years	90 years
Income	₹ 9,198	₹ 1,000	₹ 40,000
Expenditure	₹ 9,711	₹ 1,000	₹ 30,000

(201 total respondents)

Of the 201 respondents, there were four times more females than males

Female 80%	Male 20%

Transgender
Less than 1%
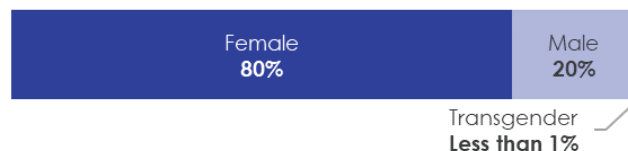
Living environment

Handwashing practices (204 respondents)

Before cooking	
After cooking	
Before eating	
Before feeding child	
After cleaning child when they have used toilet	
After using toilet	
After cleaning surfaces that may have animal feces on them	
After going to stores or other public spaces	
Before going to visit someone else's house	
After coming back home from someone else's house	

Handwashing practices are strongest around cooking and eating (98%)

Practices used by the household to make water safe for drinking (204 respondents)

Alum	
Strain through a cloth	
Boil	
No treatment	
Bleach/chlorine	
Water filter	
Uses treatment only for children	
Electric purifier	
Solar disinfection	
Only uses treatment for patients	

15% of Households are not using effective water treatment practices

Living environment

63% of **204** homes have an inspection chamber outside of the house

19% of **204** homes have an open drain outside of the house

Frequency of cleaning inspection chamber (129 total responses)

Fortnightly		26%
Weekly		4%
Monthly		29%
During the monsoon		29%
Never		11%
No response		1%

Frequency of cleaning open drains (38 total responses)

Fortnightly		18%
Weekly		11%
Monthly		34%
During the monsoon		8%
Never		29%
No response		3%

30% of respondents with an inspection chamber outside of their house clean it at least weekly

29% of respondents with an open drain outside of their house clean it at least weekly

Cleaning responsibility for inspection chamber

14%	76%	9%

- ■ Split between municipal worker and hired private cleaner
- ■ Municipal worker
- ■ Private cleaner
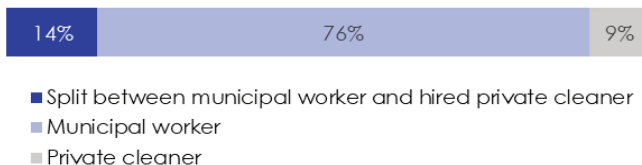
Municipal workers are responsible for cleaning most inspection chambers in the neighborhood

Cleaning responsibility for open drains

5%	89%	5%

- ■ Split between municipal worker and hired private cleaner
- ■ Municipal worker
- ■ Private cleaner
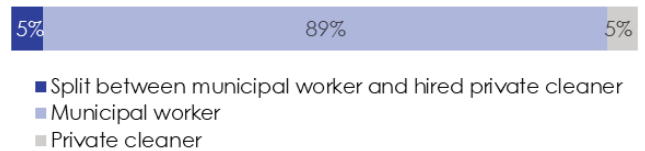
Municipal workers are responsible for cleaning most open drains in the neighborhood

Type of toilet facility in use (204 total responses)

Improved, not shared facility		87%
Shared facility		8%
Public toilet		4%
Unimproved		2%

Almost every respondent uses an improved toilet

Most of the respondents (61%) clean their toilet daily.

Access to healthcare

Illness

Only a few people in this neighborhood answered questions about illnesses. Below are some of the findings from the answers we did get. Why do you think people didn't want to talk about illnesses?

84% of **19** respondents visited a **private facility** instead of a **public facility** when they had a fever with cough and cold

94% of **18** respondents sought **out-patient care** instead of **in-patient care** when they had a fever with cough and cold

88% of **18** respondents based their careseeking preferences on **location** instead of **quality**

Maternal Health

**Awareness of various MCH schemes
(201 total respondents)**
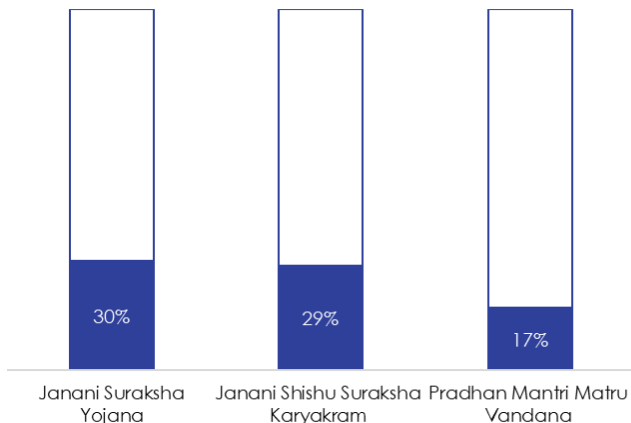
Janani Suraksha Yojana	30%
Janani Shishu Suraksha Karyakram	29%
Pradhan Mantri Matru Vandana	17%

Respondents had the least awareness of the Pradhan Mantri Matru Vandana MCH scheme

Reasons for not receiving MCH scheme benefits despite being eligible

Pradhan Mantri Matru Vandana (1 respondent): 100%

Janani Shishu Suraksha Karyakram (16 respondents): 38%, 25%, 38%

Janani Suraksha Yojana (14 respondents): 43%, 36%, 29%

- Lack of awareness at that time
- Lack of coordination from ASHA/AWW
- Lack of documents

Lack of documents and Lack of coordination from FLWs were reported as main reasons for not receiving scheme benefits

Expenditure by hospital type

	Average	Lowest	Highest
Private hospital (16 respondents)	₹ 35,250	₹ 1,000	₹ 100,000
Public hospital (17 respondents)	₹ 1,794	No cost	₹ 1,794

Not every respondent who delivered a baby at a hospital in the past five years answered this question about expenditure. Why might this be the case?

Distance to hospital by hospital type

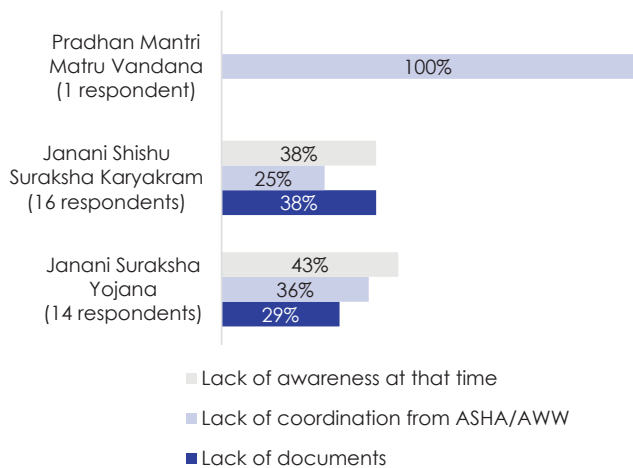|	Less than 1 km	1-3 km	More than 3 km
Private hospital (20 respondents)	25%	25%	50%
Public hospital (27 respondents)	26%	26%	48%

Private and public hospitals are located similar distances away from respondents

Services provided by ASHA (203 respondents)

Basic information about common infections (Diarrhea/acute respiratory infections)	
Motivates pregnant women for antenatal check-up, iron-folic acid tablets, tetanus toxoid	
Information on contraceptive methods	
Don't know	
Helps ANM by visiting houses and motivation for timely vaccinations for children	
Organizes/attends meetings of women's groups/health committees and other groups	
Information on sexually transmitted infections	

More than 50% of the respondents did not confirm about the services provided by ASHA

31% of **203** respondents say that ASHA is easily accessible

Yes, accessible **31%**	No, not accessible **30%**	Don't know **39%**

Breastfeeding practices (203 respondents)

Exclusive breastfeeding for first 6 months	
Don't know	
Dense first milk (colostrum) is usually given to baby on day 1	
Water/baby food/skim milk/liquids/semi-liquids etc. given to babies below 6 months	
Skim milk/power baby food is better than natural breast milk	
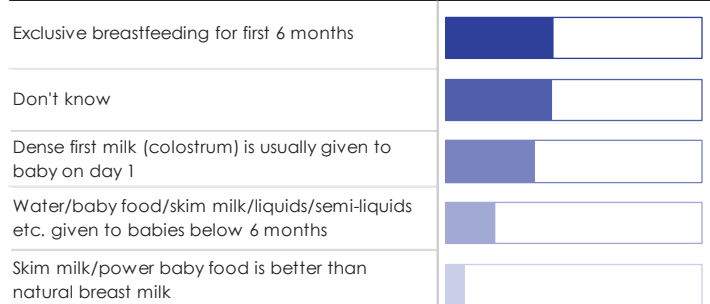
Only 34% of the families are feeding colostrum to their babies

94% of **53** deliveries in the last 5 years took place at a **hospital** instead of **at home**

56% of **50** hospital deliveries took place at a **public hospital** instead of **a private hospital**

Under-5 Child health

96% of **53** children **have** received their vaccinations

	Average	Lowest	Highest
Healthcare expenditure for children under 5	₹ 720	₹ 150	₹ 2,000

Place of child vaccination (51 total respondents)

Anganwadi centre	59%
Government Hospital	31%
Private Hospital/Clinic	9%
Other	1%

More than half of vaccinated children are vaccinated at an Anganwadi centre

Is there a malnourished child in the family? (201 respondents)

No	93%
Yes	3%
No, but I suspect they are	4%

3% of families report having at least one child who is confirmed to be malnourished (8 children total)

Do you avail nutritional support from the anganwadi? (8 respondents)

Yes, it is offered and we use it	63%
Yes, it is offered but we don't use it due to taste/palatability	13%
No response	25%

Of the 8 total malnourished children, 63% of them are using nutritional support from the anganwandi. 25% of respondents, however, did not respond. Why might this be the case?

Access to government schemes and services

Grievance redressal mechanism used by community members (204 total respondents)

Counselor or other political leader	
311 app	
CM helpline	
Never lodged a complaint	
Group visit to municipal corporation	
Nodal officer	
Through any NGO	
Don't know	

Despite having the 311 app and CM helpline available, most respondents prefer to address complaints through counselors or political leaders. However, 6% of respondents didn't use any complaint redressal mechanism at all.

Access to basic service cards (201 total respondents)

Aadhar card	
Voter ID card	

Access to social protection cards (201 total respondents)

Ration card	
Ayushman card	
Below poverty line card	

Sectors that receive the most complaints (204 total respondents)

Water supply	
Solid waste management	
Electricity	
Sanitation (inspection pits/open drains)	
Healthcare	
Traffic	

The water supply sector received the most complaints from respondents, while the traffic sector received the fewest complaints.

Majority of the respondents have access to basic service cards but the case is not the same with Social protection cards.

BUILDING HEALTHY CITIES

Community brief
Arjun Pura

Participatory research: 2020-21

Sample size: 276 households

Introduction to Arjun Pura

Arjun Pura Affordable Housing Society is strategically situated on the 30 meter wide arterial road (Lal Bagh Road) in the west side of Indore city. This is the rehabilitated housing society constructed under Affordable Housing Scheme of Government of India in 2007. Previously it was a slum settlement and was popularly known as Arjunpura slum. There are two Anganwadi centres in the community.

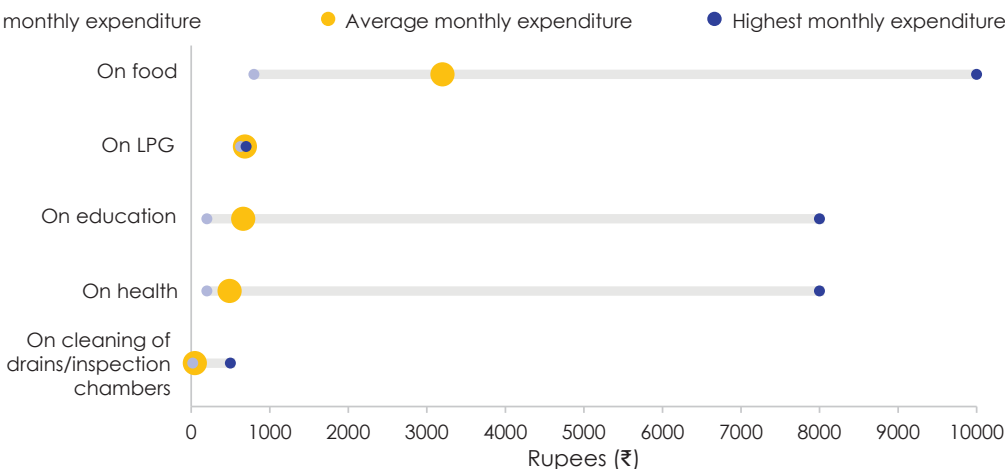| Number of households	276
Population	1987
Infrastructure	**Water Supply:** Narmada and hand pump **Sanitation:** All Households having access to toilets. **Solid Waste Management:** 100% door to door collection but people are used to throw waste in open and in Nallah,

Location map and layout plan of Arjun Pura.

Observations

Socio-economic profile of the community

Total monthly expenditure

● Lowest monthly expenditure   ● Average monthly expenditure   ● Highest monthly expenditure

On average, households spend more money on food every month than other resources.

Types of jobs held by slum inhabitants (115 respondents)

Daily-wage labourer	41%
Self-employed	14%
Driver (Autorickshaw & car)	9%
Others	9%
Domestic worker	8%
Tailor	8%
Housewife	6%
Painter	3%
Private Job	2%
Frontline workers (ASHA & AWW)	2%

Most slum inhabitants work as daily-wage labourers or are self-employed.

	Average	Lowest	Highest
Age	38 years	18 years	80 years
Income	₹ 7,063	₹ 1,000	₹ 20,000
Expenditure	₹ 8,718	₹ 1,000	₹ 25,000

(165 total respondents)

More than half of the 165 respondents were female

Female 69%	Male 31%

Living environment

Handwashing practices (160 respondents)

Before eating	
After using toilet	
After going to stores or other public spaces	
Before going to visit someone else's house	
After cooking	
Before cooking	
After coming back home from someone else's house	
Before feeding child	
After cleaning child when they have used toilet	
After cleaning surfaces that may have animal feces on them	

Practices used by the household to make water safe for drinking (160 respondents)

Strain through a cloth	
Alum	
No treatment	
Boil	

39 out of **204** households buy water due to water scarcity in summer

39

Living environment

81% of **129** homes have an inspection chamber outside of the house

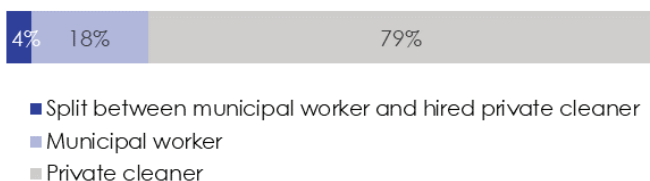**1%** of **129** homes have an open drain outside of the house

Frequency of cleaning inspection chamber (112 total responses)

Fortnightly	1%
Weekly	9%
Monthly	66%
During the monsoon	23%
Never	1%

Frequency of cleaning open drains (1 response)

Fortnightly	0%
Weekly	0%
Monthly	100%
During the monsoon	0%
Never	0%

Cleaning responsibility for inspection chamber

4%	18%	79%

■ Split between municipal worker and hired private cleaner
■ Municipal worker
■ Private cleaner

Cleaning responsibility for open drains

100%

■ Split between municipal worker and hired private cleaner
■ Municipal worker
■ Private cleaner
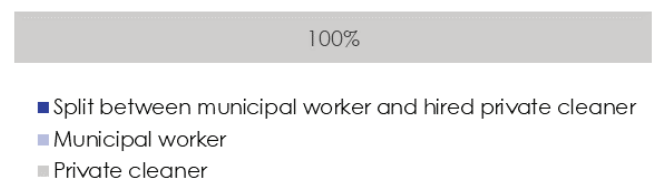
Type of toilet facility in use (160 total responses)

Improved, not shared facility	25%
Public toilet	0%
Shared facility	3%
Unimproved	73%

Most respondents use an unimproved toilet

Cleaning practice of toilet (160 total responses)

Daily	45%
Few times a week	55%
Weekly	0%
Once or twice in two weeks	0%
Monthly, once or less	0%

All respondents clean their toilets at least a few times a week

Access to healthcare

Illness

Only a few people in this neighborhood answered questions about illnesses. Below are some of the findings from the answers we did get. Why do you think people didn't want to talk about illnesses?

56% of **25** respondents visited a **private facility** instead of a **public facility** when they had a fever with cough and cold

100% of **25** respondents sought **out-patient care** instead of **in-patient care** when they had a fever with cough and cold

56% of **25** respondents based their careseeking preferences on **price** instead of **quality** or **location**
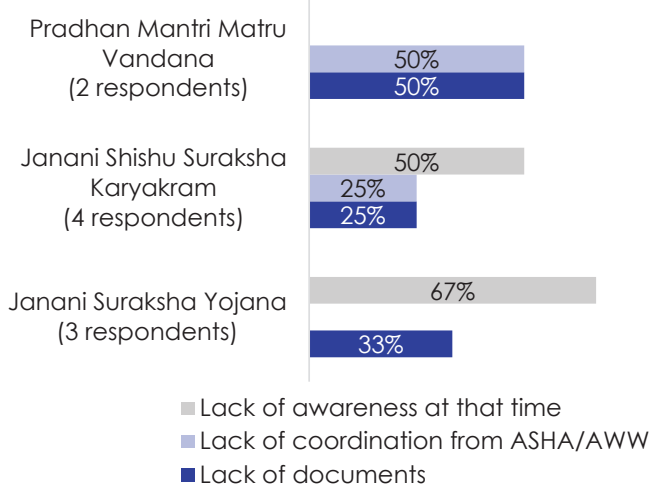
Maternal Health

**Awareness of various MCH schemes
(160 total respondents)**
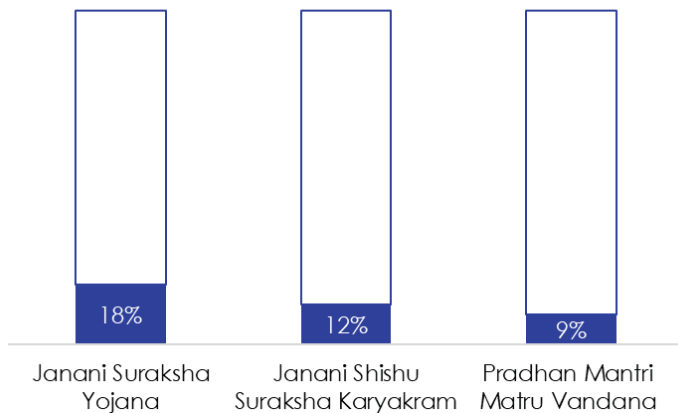
18%	12%	9%
Janani Suraksha Yojana	Janani Shishu Suraksha Karyakram	Pradhan Mantri Matru Vandana

Respondents had the least awareness of the Pradhan Mantri Matru Vandana MCH scheme

Reasons for not receiving MCH scheme benefits despite being eligible

Pradhan Mantri Matru Vandana
(2 respondents)
- 50%
- 50%

Janani Shishu Suraksha Karyakram
(4 respondents)
- 50%
- 25%
- 25%

Janani Suraksha Yojana
(3 respondents)
- 67%
- 33%

- ▇ Lack of awareness at that time
- ▇ Lack of coordination from ASHA/AWW
- ▇ Lack of documents

Lack of awareness and lack of documents has come up as the major reason for not receiving MCH benefits

Expenditure by hospital type

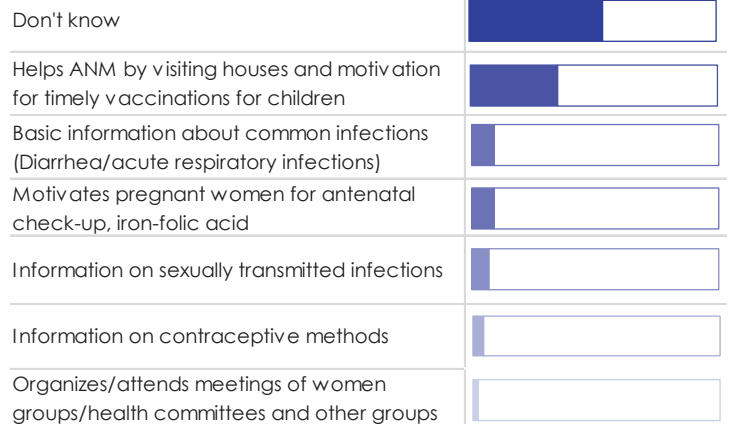|	Average	Lowest	Highest
Private hospital (14 respondents)	₹ 29,231	₹ 10,000	₹ 65,000
Public hospital (25 respondents)	₹ 1,696	No cost	₹ 4,000

Despite of zero cost services being offered at Public hospitals, people are opting for Private hospitals.

Distance to hospital by hospital type

	Less than 1 km	1-3 km	More than 3 km
Private hospital (14 respondents)	0%	0%	100%
Public hospital (25 respondents)	0%	0%	100%

All public and private hospitals used for delivery are located more than 3 kilometers away

Services provided by ASHA (162 respondents)

Don't know	
Helps ANM by visiting houses and motivation for timely vaccinations for children	
Basic information about common infections (Diarrhea/acute respiratory infections)	
Motivates pregnant women for antenatal check-up, iron-folic acid	
Information on sexually transmitted infections	
Information on contraceptive methods	
Organizes/attends meetings of women groups/health committees and other groups	

Majority of the respondents were not aware about the services provided by ASHA

32% of 162 respondents say that ASHA is easily accessible

Yes, accessible 32%	No, not accessible 17%	Don't know 51%

Breastfeeding practices (162 respondents)

Exclusive breastfeeding for first 6 months	
Water/baby food/skim milk/liquids/semi-liquids etc. given to babies below 6 months	
Dense first milk (colostrum) is usually given to baby on day 1	
Don't know	
Skimmed milk/powder baby food is better than natural breast milk	
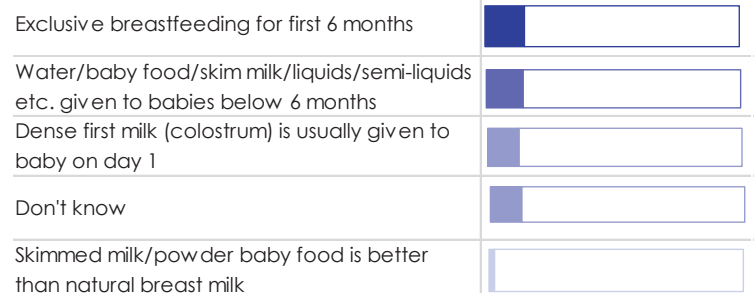
Breastfeeding knowledge practices in the community need much improvement

100% of **39** deliveries in the last 5 years took place at a **hospital** instead of **at home**

64% of **39** hospital deliveries took place at a **public hospital** instead of **a private hospital**

79

Under-5 Child health

96% of **53** children **have** received their vaccinations

	Average	Lowest	Highest
Healthcare expenditure for children under 5	₹ 166	₹ 100	₹ 200

Place of child vaccination (51 total respondents)

Anganwadi centre		59%
Government Hospital		31%
Private Hospital/Clinic		9%
Other		1%

More than half of vaccinated children are vaccinated at an Anganwadi centre

Is there a malnourished child in the family? (162 respondents)

No		99%
Yes		0%
No, but I suspect they are		1%

Only 1% of the respondents suspected that their child is malnourished and requires diagnosis

Do you avail nutritional support from the anganwadi? (8 respondents)

Yes, it is offered and we use it		63%
Yes, it is offered but we don't use it due to taste/palatability		13%
No response		25%

Of the 8 total malnourished children, 63% of them are using nutritional support from the anganwandi. 25% of respondents, however, did not respond. Why might this be the case?

Access to government schemes and services

Grievance redressal mechanism used by community members (160 respondents)

Never lodged a complaint	
Counselor or other political leader	
Don't know	
CM helpline	
311 app	
Nodal officer	

Despite having the 311 app and CM helpline available, most respondents prefer to address complaints through counselors or political leaders. However, 51% of respondents didn't use any complaint redressal mechanism at all.

Sectors that receive the most complaints (160 respondents)

Solid waste management	
Electricity	
Healthcare	
Sanitation	
Water supply	
Traffic	

The solid waste management sector received the most complaints from respondents, while the traffic sector received the fewest complaints.

Access to basic service cards (165 total respondents)

Aadhar card	
Voter ID card	

Access to social protection cards (165 total respondents)

Below poverty line card	
Ayushman card	
Ration card	

BUILDING HEALTHY CITIES

Community brief
West Indira Ekta Nagar

Participatory research: 2020-21

Sample size: 167 households

Introduction to West Indira Ekta Nagar

West Indira Ekta Nagar is situated along the Eastern Ring Road near Musakhedi square. It is approximately 40 years old. The inhabitants come from Tillaur, Jainpura, Lalitpur, Khargon, Datia, Nimad and Bundelkhand. Most had come to earn their living, then some bought land, while the others just occupied land on the side of the Nallah. Most belong to Harijan Community. It's a tenable slum and has 2 anganwadi centres.

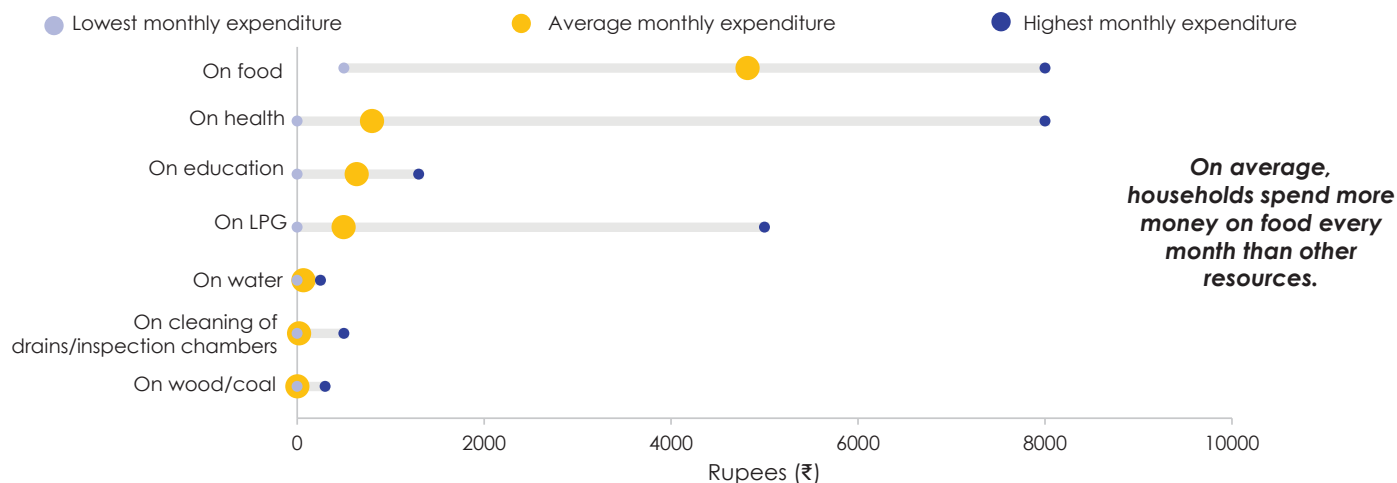| Number of households	262
Population	1372
Infrastructure	**Water Supply:** Narmada Pipeline, 2 borewell **Sanitation:** All households have access to toilets **Solid Waste Management: 100% door to door collection**

Location map and layout plan of West Indira Ekta Nagar.

Observations

Socio-economic profile of the community

Total monthly expenditure

- Lowest monthly expenditure
- Average monthly expenditure
- Highest monthly expenditure

On food
On health
On education
On LPG
On water
On cleaning of drains/inspection chambers
On wood/coal

Rupees (₹)

On average, households spend more money on food every month than other resources.

	Average	Lowest	Highest
Age (167 respondents)	39 years	18 years	70 years
Income (148 respondents)	₹ 7,682	₹ 1,000	₹ 20,000
Expenditure (164 respondents)	₹ 8,792	₹ 1,000	₹ 30,000

Most of the 167 respondents were female

Female 86%	Male 14%

Top jobs held by slum inhabitants* (164 respondents)

Job	%
Daily wage worker	40%
Housewife	21%
Self-employed	6%
Porter	4%
Tailor	4%
Domestic worker	4%
Municipal worker	4%
Carpenter	3%
Driver	2%
Industry worker	2%
Painter	2%
Private job	2%
Scrap dealer	2%

40% of slum inhabitants are daily wage laborers
*Unemployed, ASHA workers, cleaners, photographers, potters, priests, retired servicemen, and students each make up 1% of respondents.
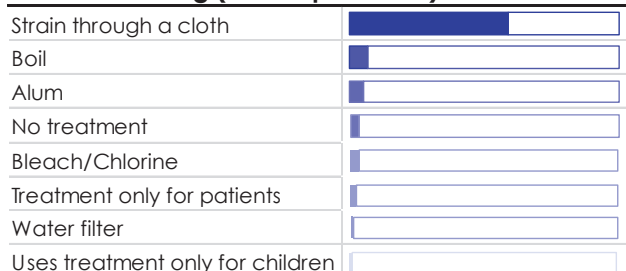
Living environment

Handwashing practices (167 respondents)

- Before eating
- Before cooking
- After cooking
- After going to stores or other public spaces
- Before going to visit someone else's house
- After using toilet
- Before feeding child
- After coming back home from someone else's house
- After cleaning child when they have used the toilet
- After cleaning surfaces that may have had animal feces
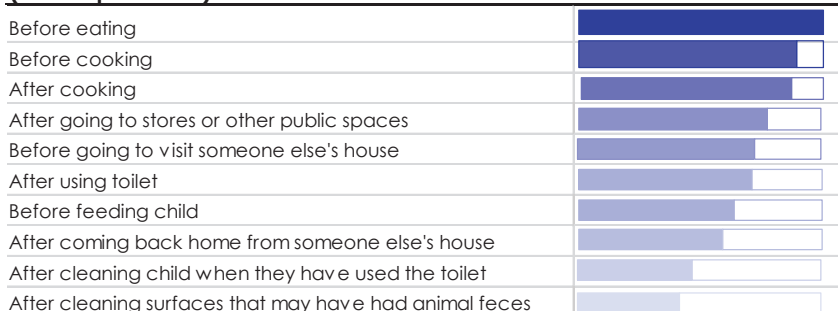
Handwashing practices are strongest around eating and cooking

Practices used by the household to make water safe for drinking (167 respondents)

- Strain through a cloth
- Boil
- Alum
- No treatment
- Bleach/Chlorine
- Treatment only for patients
- Water filter
- Uses treatment only for children

15% of Households are not using effective water treatment practices

Living environment

39% of **166** homes have an inspection chamber outside of the house

5% of **166** homes have an open drain outside of the house

Frequency of cleaning inspection chamber (64 total responses)

Daily	3%
Fortnightly	0%
Weekly	0%
Monthly	5%
During the monsoon	59%
Never	33%

Inspection chamber is mostly cleaned during the monsoon
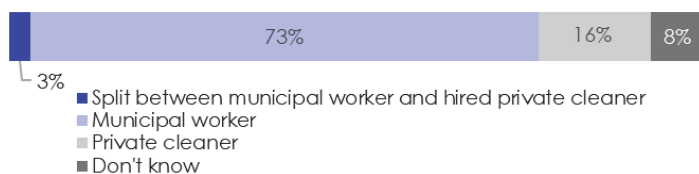
Frequency of cleaning open drains (8 responses)

Daily	88%
Fortnightly	0%
Weekly	0%
Monthly	0%
During the monsoon	13%
Never	0%

Open drains are cleaned daily

Cleaning responsibility for inspection chamber

3%	73%	16%	8%

■ Split between municipal worker and hired private cleaner
■ Municipal worker
■ Private cleaner
■ Don't know

Cleaning responsibility for open drains

96%	4%

■ Municipal worker
■ Private cleaner
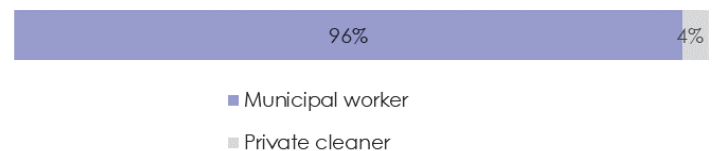
Type of toilet facility in use (166 total responses)

Improved, not shared facility	61%
Shared facility	20%
Unimproved	15%
Public	3%

Most respondents use an improved, unshared toilet facility

Cleaning practice of toilet (166 total responses)

Daily	55%
Few times a week	39%
Weekly	4%
Once or twice in two weeks	1%
Monthly once or less	0%
Don't know	1%

Almost all respondents clean their toilet at least a few times a week

Access to healthcare
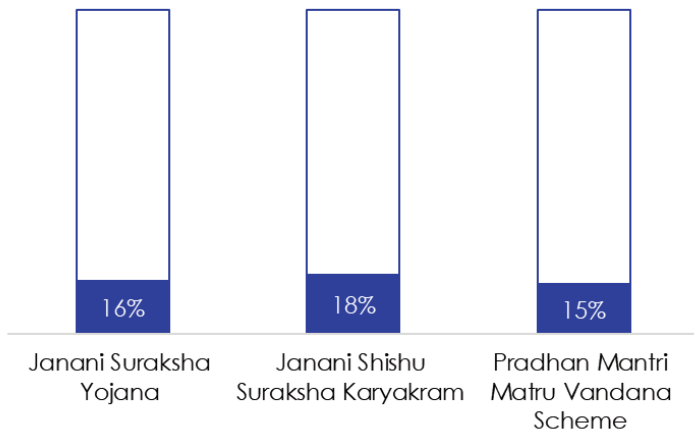
Illness

Intro statement of some kind

59% of **44** respondents visited a **public facility** instead of a **private facility** when they had a fever with cough and cold

98% of **44** respondents sought **out-patient care** instead of **in-patient care** when they had a fever with cough and cold

82% of **44** respondents based their careseeking preferences on **location** instead of **quality** or **cost**
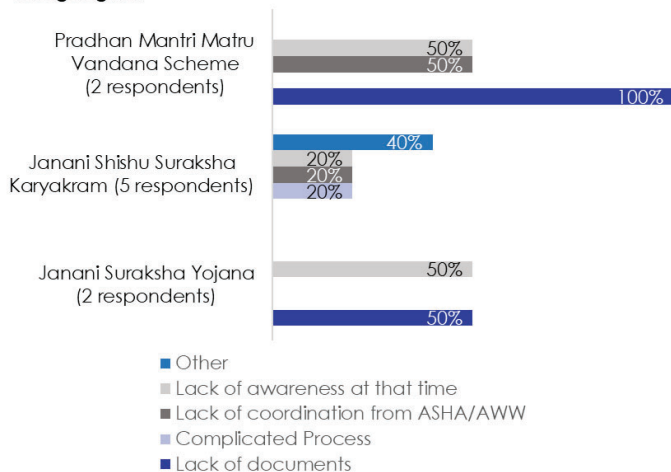
Maternal Health

Awareness of various MCH schemes (165 respondents)

16%	18%	15%
Janani Suraksha Yojana	Janani Shishu Suraksha Karyakram	Pradhan Mantri Matru Vandana Scheme

Majority of the respondents were unaware of government MCH schemes

Reasons for not receiving MCH scheme benefits despite being eligible

- ■ Other
- ■ Lack of awareness at that time
- ■ Lack of coordination from ASHA/AWW
- ■ Complicated Process
- ■ Lack of documents

Lack of documents and Lack awareness were reported as main reasons for not receiving scheme benefits

Expenditure by hospital type

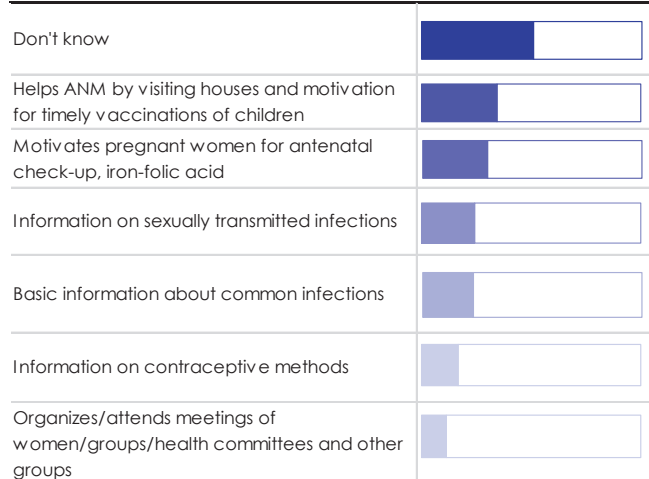|	Average	Lowest	Highest
Private hospital (8 respondents)	₹ 27,000	₹ 15,000	₹ 60,000
Public hospital (37 respondents)	₹ 2,695	No cost	₹ 10,000

Majority of the respondents preferred public hospitals for deliveries probably because of the low expenditure

Distance to hospital by hospital type

	Less than 1 km	1-3 km	More than 3 km
Private hospital (8 respondents)	0%	13%	88%
Public hospital (37 respondents)	3%	3%	95%

Services provided by ASHA (165 respondents)

Don't know

Helps ANM by visiting houses and motivation for timely vaccinations of children

Motivates pregnant women for antenatal check-up, iron-folic acid

Information on sexually transmitted infections

Basic information about common infections

Information on contraceptive methods

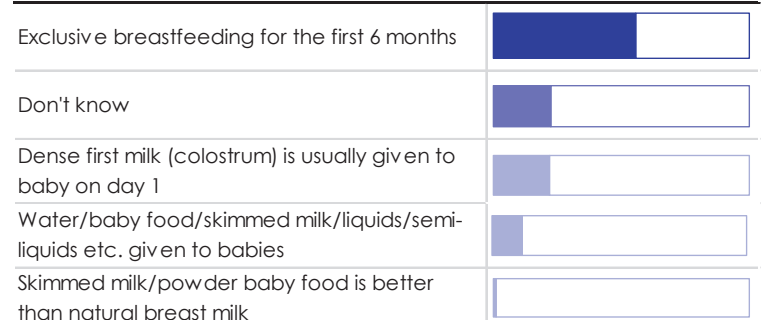Organizes/attends meetings of women/groups/health committees and other groups

More than 50% of the respondents did not confirm about the services provided by ASHA

60% of 165 respondents say that ASHA is easily accessible

Yes, accessible 60%	No, not accessible 17%	Don't know 23%

Breastfeeding practices (188 respondents)

Exclusive breastfeeding for the first 6 months

Don't know

Dense first milk (colostrum) is usually given to baby on day 1

Water/baby food/skimmed milk/liquids/semi-liquids etc. given to babies

Skimmed milk/powder baby food is better than natural breast milk

22% of the respondents were unaware about the breastfeeding practices

90% of **54** deliveries in the last 5 years took place at a **hospital** instead of **at home**

82% of **45** hospital deliveries took place at a **public hospital** and **18%** took place at a **private hospital**

Under-5 Child health

100% of **49** children **have** received their vaccinations

Place of child vaccination (49 total respondents)

Anganwadi centre	88%
Government hospital	12%

Most vaccinated children are vaccinated at an Anganwadi centre

	Average	Lowest	Highest
Healthcare expenditure for children under 5	₹ 290	₹ 0	₹ 500

11 out of **53** respondents said that their child has been sick in the past year

Is there a malnourished child in the family? (160 respondents)

No	98%
No, but I suspect they are	< 1%
Yes	2%

Access to government schemes and services

Grievance redressal mechanism used by community members (167 total respondents)

- Through counselor or other political leader
- Never lodged a complaint
- CM helpline
- Don't know
- Group visit to municipal corporation/government
- 311 app
- Through any NGO
- To Nodal officer

Despite having the 311 app and CM helpline available, respondents prefer to address complaints through counselors and political leaders.

Access to basic service cards (167 total respondents)

Aadhar card	
Voter ID card	

Access to social protection cards (167 total respondents)

Ration card	
Below poverty line card	
Ayushman card	

Most respondents have basic service cards but not social protection cards

Sectors that receive the most complaints (126 respondents)

- Electricity
- Water Supply
- Solid Waste Management
- Don't know
- Other
- Sanitation
- Healthcare

Electricity, water supply and SWM received the most complaints

BUILDING HEALTHY CITIES

Community brief
Luniyapura

Participatory research: 2020-21

Sample size: 102 households

Observations

Socio-economic profile of the community
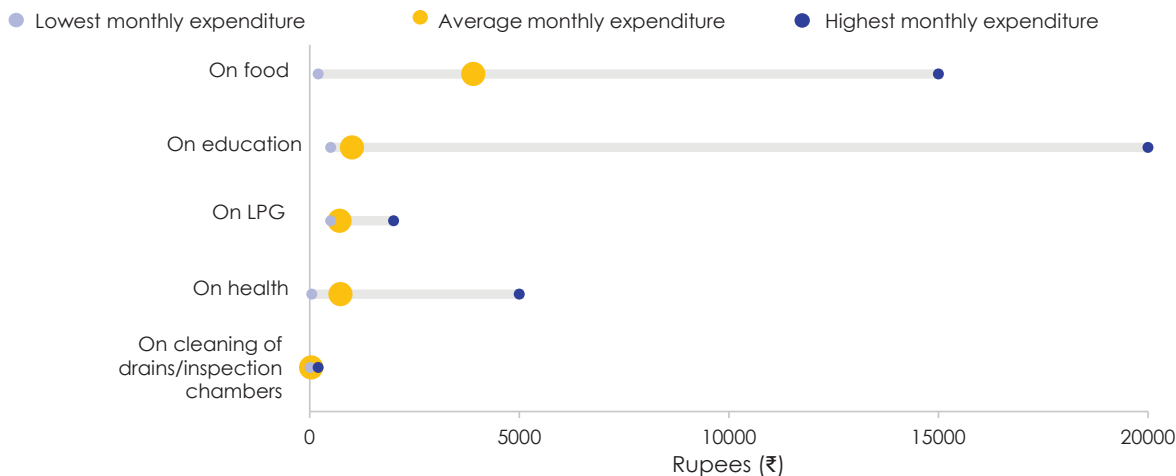
Total monthly expenditure

● Lowest monthly expenditure   ● Average monthly expenditure   ● Highest monthly expenditure

On average, households spend more money on food every month than other resources.

Types of jobs held by slum inhabitants (101 respondents)

Daily-wage labourer	69%
Private Job	14%
Autorickshaw driver	4%
Porter	3%
Bus conductor	2%
Bus helper	1%
Gardener	1%
Mechanic	1%
Military	1%
Painter	1%
Police	1%
Self-employed	1%
Vegetable seller	1%

Most slum inhabitants work as daily-wage labourers

	Average	Lowest	Highest
Age	40 years	18 years	70 years
Income	₹ 11,333	₹ 1,000	₹ 36,000
Expenditure	₹ 9,642	₹ 1,000	₹ 36,000

(102 total respondents)

More than half of the 102 respondents were female
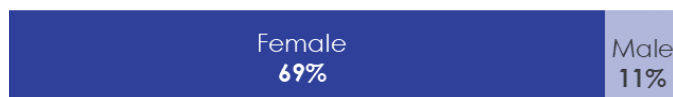
Female 69%	Male 11%

Living environment

Handwashing practices (102 respondents)

- Before cooking
- After cooking
- Before eating
- After using toilet
- After coming back home from someone else's house
- After cleaning surfaces that may have animal feces on them
- Before going to visit someone else's house
- After cleaning child when they have used toilet
- Before feeding child
- After going to stores or other public spaces

Practices used by the household to make water safe for drinking (102 respondents)

- Strain through a cloth
- No treatment
- Alum
- Boil
- Bleach/Chlorine

Living environment

47% of **102** homes have an inspection chamber outside of the house

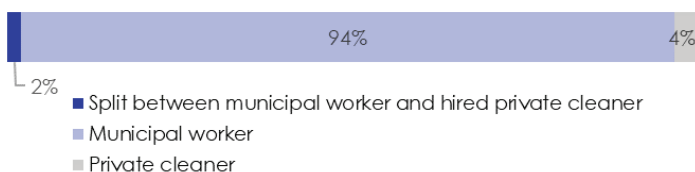**12%** of **102** homes have an open drain outside of the house

Frequency of cleaning inspection chamber (48 total responses)

Fortnightly	2%
Weekly	4%
Monthly	83%
During the monsoon	4%
Never	6%

Frequency of cleaning open drains (12 responses)

Fortnightly	17%
Weekly	8%
Monthly	42%
During the monsoon	8%
Never	25%

Cleaning responsibility for inspection chamber

94%   4%

2%

- Split between municipal worker and hired private cleaner
- Municipal worker
- Private cleaner

Cleaning responsibility for open drains

100%

- Municipal worker

Type of toilet facility in use (102 total responses)

Improved, not shared facility	86%
Shared facility	9%
Unimproved	3%
Public	2%

Most respondents use an improved, unshared toilet facility

Cleaning practice of toilet (102 total responses)

Daily	68%
Few times a week	26%
Weekly	2%
Once or twice in two weeks	2%

Almost all respondents clean their toilets at least a few times a week

Access to healthcare

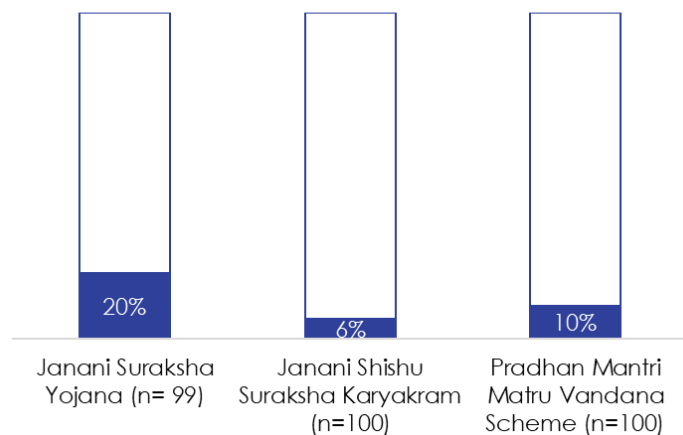## Illness

Intro statement of some kind

72% of **102** respondents visited a **public facility** instead of a **private facility** when they had a fever with cough and cold

100% of **102** respondents sought **out-patient care** instead of **in-patient care** when they had a fever with cough and cold

83% of **103** respondents based their careseeking preferences on **location** instead of **quality** or **price**

Maternal Health

Awareness of various MCH schemes

20%	6%	10%
Janani Suraksha Yojana (n= 99)	Janani Shishu Suraksha Karyakram (n=100)	Pradhan Mantri Matru Vandana Scheme (n=100)

Respondents had the least awareness of the Janani Shishu Suraksha Karyakram MCH scheme

62% of 100 respondents say that ASHA is easily accessible

Yes, accessible 62%		Don't know 33%

No, not accessible
5%

100% of respondents who did not receive MCH scheme benefits despite being eligible did not receive them due to a **lack of awareness**

Services provided by ASHA (257 respondents)

Don't know	
Helps ANM by visiting houses and motivation for timely vaccinations for children	
Motivates pregnant women for antenatal check-up, iron-folic acid	
Information on sexually transmitted infections	

Most respondents were not aware of the services provided by ASHA

Breastfeeding practices (100 respondents)

Dense first milk (colostrum) is usually given to baby on day 1	
Exclusive breastfeeding for the first 6 months	
Don't know	

Breastfeeding knowledge practices in the community need much improvement

Expenditure by hospital type

	Average	Lowest	Highest
Private hospital (8 respondents)	₹ 11,375	₹ 6,000	₹ 20,000
Public hospital (6 respondents)	₹ 850	No cost	₹ 3,000

93% of **15** deliveries in the last 5 years took place at a **hospital** instead of **at home**

Distance to hospital by hospital type

	Less than 1 km	1-3 km	More than 3 km
Private hospital (8 respondents)	38%	50%	12%
Public hospital (6 respondents)	17%	17%	67%

57% of **14** hospital deliveries took place at a **private hospital** instead of **a public hospital**

Under-5 Child health

89% of **19** children **have** received their vaccinations

Place of child vaccination (19 total respondents)

Anganwadi centre		53%
Private Hospital/Clinic		32%
Government hospital		16%

Most vaccinated children are vaccinated at an Anganwadi centre

	Average	Lowest	Highest
Healthcare expenditure for children under 5	₹ 586	₹ 100	₹ 1,000

Only **7** out of **103** respondents said that their child has been sick in the past year

Is there a malnourished child in the family? (98 respondents)

No	99%
Yes	1%

Only 1% of the respondents reported a malnourished child in the family

Access to government schemes and services

Grievance redressal mechanism used by community members (102 total respondents)

Never lodged a complaint	
CM helpline	
Counselor or other political leader	
311 app	
Don't know	
Group visit to municipal corporation/department	

Despite having the 311 app available, most respondents prefer to address complaints through the CM helpline or through counselors and political leaders. However, 47% of respondents didn't use any complaint redressal mechanism at all.

Access to basic service cards (102 total respondents)

Aadhar card	
Voter ID card	

Sectors that receive the most complaints (102 respondents)

Electricty	
Sanitation	
Water supply	
Solid Waste Management	
Don't know	

Access to social protection cards (102 total respondents)

Ration card	
Ayushman card	
Below poverty line card	

BUILDING HEALTHY CITIES

Community brief
Narwal

Participatory research: 2020-21

Sample size: 185 households

Introduction to Narwal

Community is situated on the North-Western part of the city on the side of Indore Ujjain Road. Before 2014, it was under rural area; after expansion of municipal limits it falls under jurisdiction of Indore Municipal Corporation. Two sides of the slum are open to drains which are highly polluted by wastes coming from small scale factories in the neighbourhood. Community is accessible by cement concrete road. There is one primary school and one middle school in the community.

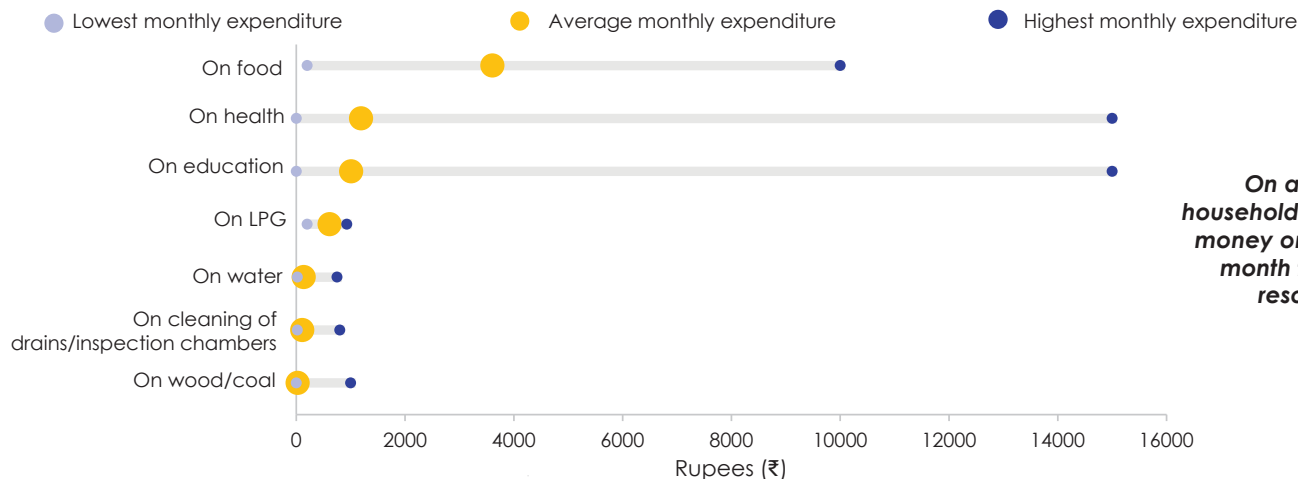| Number of households	400
Population	2450
Infrastructure	**Water Supply:** Narmada pipelines in only two streets, 8 borewells (poor water quality) **Sanitation:** All households have access to toilets **Solid Waste Management:** 100% door to door collection

Location map and layout plan of Narwal.
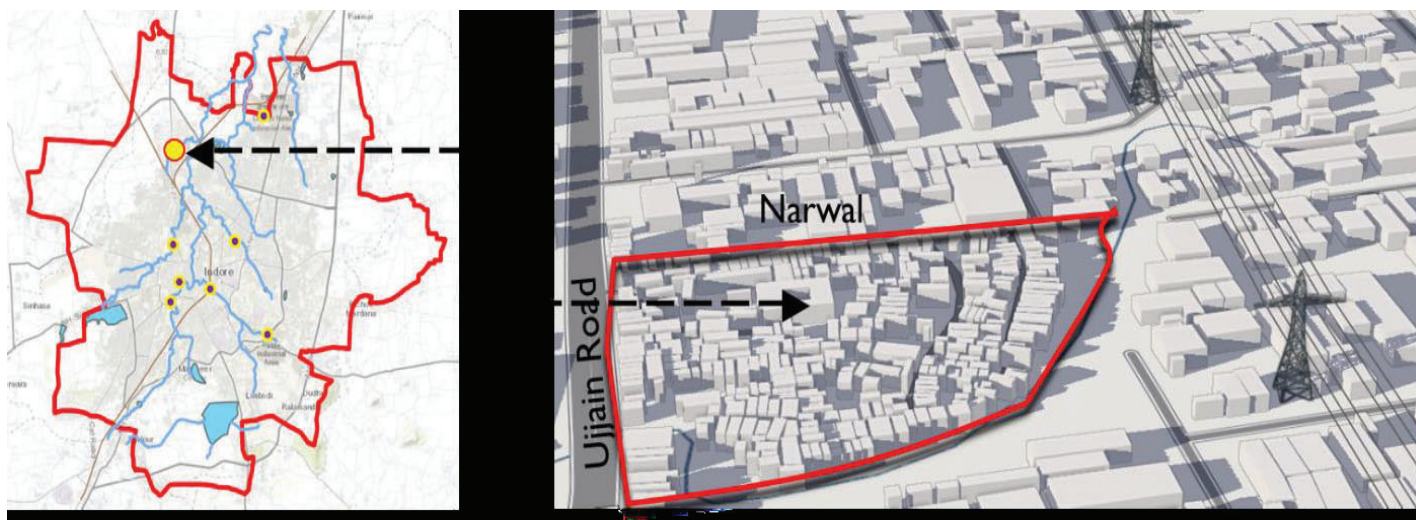
Observations

Socio-economic profile of the community

Total monthly expenditure

On average, households spend more money on food every month than other resources.

Types of jobs held by slum inhabitants (185 respondents)

Daily wage worker	75%
Municipal worker	5%
Private job	4%
Self-employed	4%
Driver	2%
Factory worker	2%
Domestic worker	1%
Nurse	1%
Barber	1%
Gardener	1%
Housewife	1%
Milkman	1%
Milkmakers	1%

75% of slum inhabitants are daily wage laborers

	Average	Lowest	Highest
Age	36 years	18 years	70 years
Income	₹ 12,736	₹ 1,200	₹ 30,000
Expenditure	₹ 9,172	₹ 1,000	₹ 25,520

(180 total respondents)

Most of the 185 respondents were female

Female 78%	Male 22%

Living environment

Handwashing practices (187 respondents)

Before cooking	
After cooking	
After cleaning child when they have used toilet	
Before eating	
After using toilet	
Before feeding child	
After cleaning surfaces that may have animal feces on them	
After going to stores or other public spaces	
Before going to visit someone else's house	
After coming back home from someone else's house	

Practices used by the household to make water safe for drinking (187 respondents)

Strain through a cloth	
Alum	
No treatment	
Boil	
Water filter	
Let it sit and settle	
Solar disinfection	
Bleach/Chlorine	
Electric purifier	
Uses treatment only for children	
Treatment only for patients	

Living environment

65% of **187** homes have an inspection chamber outside of the house

14% of **187** homes have an open drain outside of the house

Frequency of cleaning inspection chamber (121 total responses)

Daily	2%
Fortnightly	2%
Weekly	1%
Monthly	74%
During the monsoon	20%
Never	0%

Inspection chambers are cleaned monthly

Frequency of cleaning open drains (26 responses)

Daily	8%
Fortnightly	0%
Weekly	0%
Monthly	38%
During the monsoon	46%
Never	8%

Open drains are mostly cleaned monthly and during the monsoon

Cleaning responsibility for inspection chamber

1%
2%
98%

- Split between municipal worker and hired private cleaner
- Municipal worker
- Private cleaner
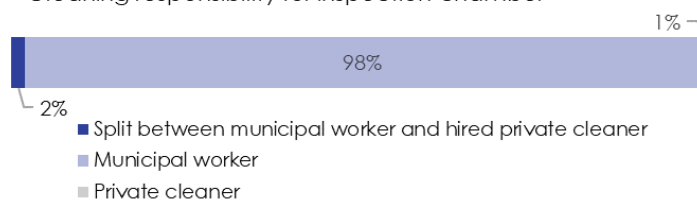
Municipal worker is mainly responsible for cleaning

Cleaning responsibility for open drains

4%
96%

- Split between municipal worker and hired private cleaner
- Municipal worker

Type of toilet facility in use (187 total responses)

Improved, not shared facility	87%
Shared facility	7%
Unimproved	6%
Public	0%

Most respondents use an improved, unshared toilet facility

Cleaning practice of toilet (187 total responses)

Daily	57%
Few times a week	10%
Weekly	14%
Once or twice in two weeks	3%
Monthly once or less	2%
No response	14%

More than half of all respondents clean their toilet on a daily basis

Access to healthcare

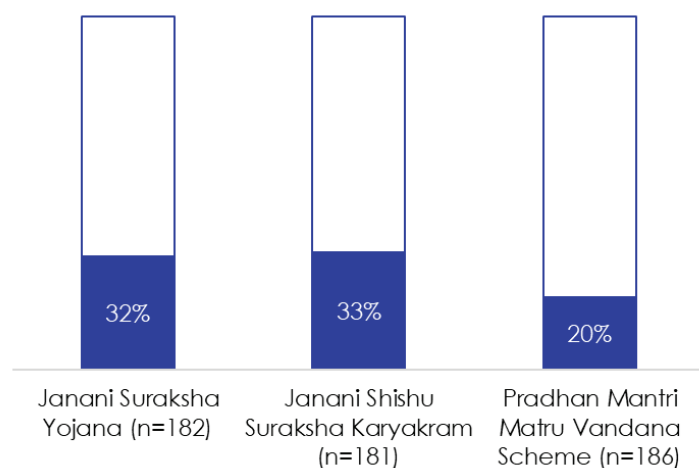## Illness

Intro statement of some kind

55% of **128** respondents visited a **private facility** instead of a **public facility** when they had a fever with cough and cold

94% of **128** respondents sought **out-patient care** when they had a fever with cough and cold
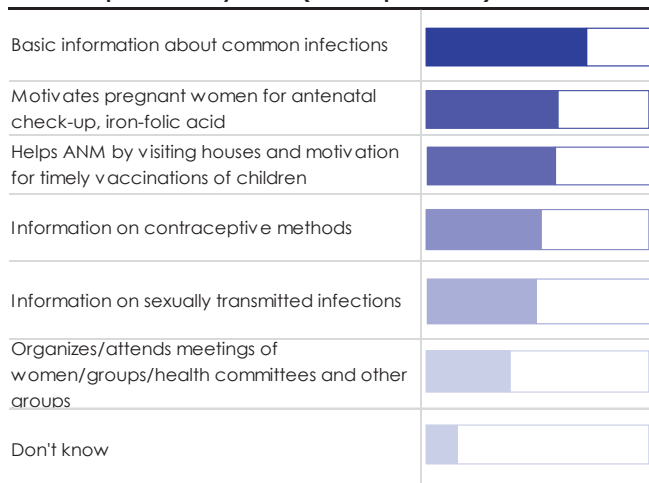
79% of **128** respondents based their careseeking preferences on **location** instead of **quality** or **cost**
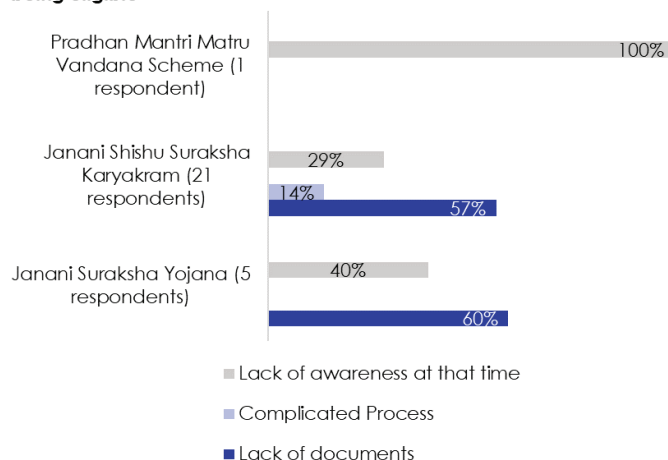
Maternal Health

Awareness of various MCH schemes

Janani Suraksha Yojana (n=182)	Janani Shishu Suraksha Karyakram (n=181)	Pradhan Mantri Matru Vandana Scheme (n=186)
32%	33%	20%

Services provided by ASHA (188 respondents)

Basic information about common infections	
Motivates pregnant women for antenatal check-up, iron-folic acid	
Helps ANM by visiting houses and motivation for timely vaccinations of children	
Information on contraceptive methods	
Information on sexually transmitted infections	
Organizes/attends meetings of women/groups/health committees and other groups	
Don't know	

Reasons for not receiving MCH scheme benefits despite being eligible

Pradhan Mantri Matru Vandana Scheme (1 respondent)	100%
Janani Shishu Suraksha Karyakram (21 respondents)	29% / 14% / 57%
Janani Suraksha Yojana (5 respondents)	40% / 60%

■ Lack of awareness at that time
■ Complicated Process
■ Lack of documents

63% of 188 respondents say that ASHA is easily accessible

Yes, accessible 63%	No, not accessible 15%	Don't know 21%

Breastfeeding practices (188 respondents)

Exclusive breastfeeding for the first 6 months	
Dense first milk (colostrum) is usually given to baby on day 1	
Water/baby food/skimmed milk/liquids/semi-liquids etc. given to babies	
Skimmed milk/powder baby food is better than natural breast milk	
Don't know	
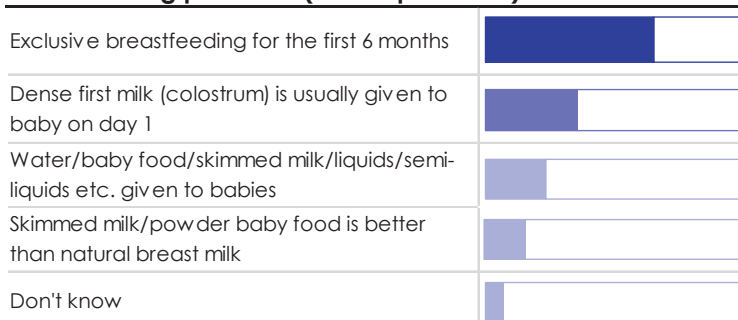
Expenditure by hospital type

	Average	Lowest	Highest
Private hospital (38 respondents)	₹ 5,188	₹ 500	₹ 10,000
Public hospital (8 respondents)	₹ 1,736	No cost	₹ 22,000

Surprisingly, higher cost was incurred in a public hospital

87% of **53** deliveries in the last 5 years took place at a **hospital** instead of **at home**

Distance to hospital by hospital type

	Less than 1 km	1-3 km	More than 3 km
Private hospital (38 respondents)	3%	5%	92%
Public hospital (8 respondents)	13%	25%	63%

Majority of respondents accessed healthcare from hospitals that were more than 3 KMs away

83% of **46** hospital deliveries took place at a **private hospital** and **17%** took place at a **public hospital**

Under-5 Child health

98% of **49** children **have** received their vaccinations

Place of child vaccination (49 total respondents)

Anganwadi centre	80%
Government hospital	20%

Most vaccinated children are vaccinated at an Anganwadi centre

	Average	Lowest	Highest
Healthcare expenditure for children under 5	₹ 567	₹ 200	₹ 2,000

34 out of **63** respondents said that their child has been sick in the past year
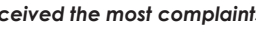
Is there a malnourished child in the family? (173 respondents)

No	88%
No, but I suspect they are	9%
Yes	3%

A few respondents suspected that their child is malnourished

Access to government schemes and services

Grievance redressal mechanism used by community members (187 total respondents)

- Never lodged a complaint
- Through counselor or other political leader
- Group visit to municipal corporation/department
- CM helpline
- Through any NGO
- To nodal officer
- Don't know
- 311 app

Despite having the 311 app and CM helpline available, respondents prefer to address complaints through counselors and political leaders. However, 68% of respondents didn't use any complaint redressal mechanism at all.

Access to basic service cards (185 total respondents)

- Voter ID card
- Aadhar card

Sectors that receive the most complaints (187 respondents)

- Sanitation
- Water Supply
- Solid Waste Management
- Healthcare
- Electricity
- Traffic
- Don't know

Sanitation and watersupply received the most complaints

Access to social protection cards (185 total respondents)

- Ration card
- Below poverty line card
- Ayushman card

BUILDING HEALTHY CITIES

Community brief
Rahul Gandhi Nagar

Participatory research: 2020-21

Sample size: 257 households

Introduction to Rahul Gandhi Nagar

Rahul Gandhi Nagar is situated in the northern periphery of Indore City, near Agra-Bombay Road (NH-3). It comes under ward no. 35, zone no. 8. and spreads over an area of 8.90 acres (36020.67 Sq. m). This community is one among the 646 slums present in the City. There are two AWCs in the community. The community had middle scale industries in the north.

Number of households	844
Population	4500
Infrastructure	**Water Supply:** Borewell (poor water quality) **Sanitation:** All households have access to toilet **Solid Waste Management:** 100% door to door collection. Only 60% HH segregate waste at home

Location map and layout plan of Rahul Gandhi Nagar.
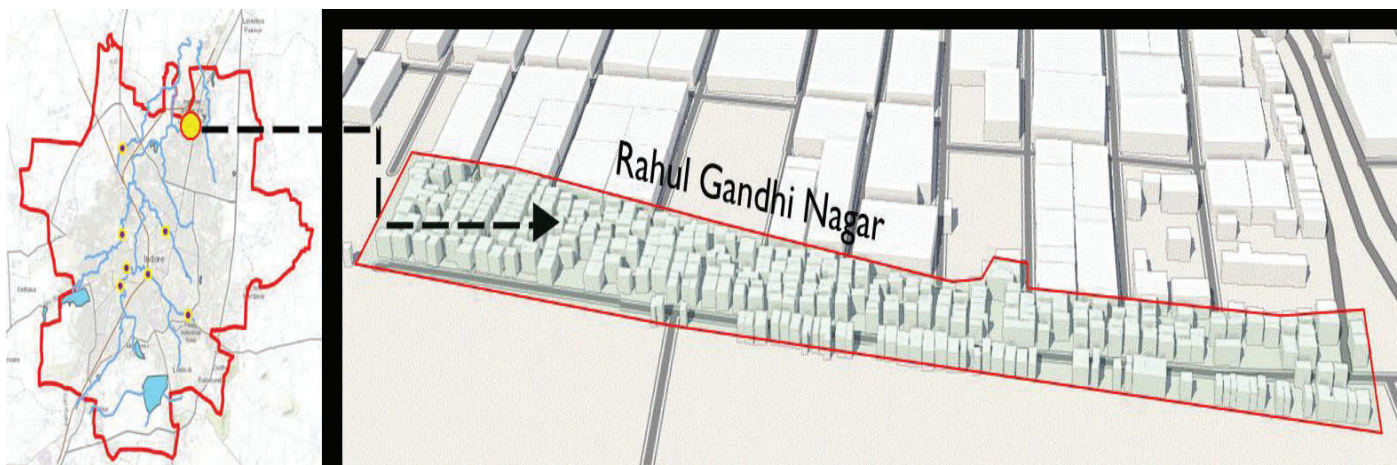
Observations

Socio-economic profile of the community

Total monthly expenditure

- Lowest monthly expenditure
- Average monthly expenditure
- Highest monthly expenditure

On average, households spend more money on food every month than other resources.

Top jobs held by slum inhabitants*
(184 respondents)

Daily wage worker	55%
Private job	10%
Driver	8%
Fruit seller	4%
Porter	3%
Vegetable seller	3%
Housewife	2%
Industrial worker	2%
Construction worker	2%
Gardener	2%

75% of slum inhabitants are daily wage laborers
*Beauticians, electricians, self-employed, watchmen, carpenters, chefs, domestic workers, engineers, factory workers, government workers, milkmen, plumbers, and technicians each make up 1% of respondents.

	Average	Lowest	Highest
Age (257 respondents)	33 years	18 years	65 years
Income (250 respondents)	₹ 9,284	₹ 300	₹ 40,000
Expenditure (116 respondents)	₹ 6,463	₹ 1,830	₹ 20,000

Add in a sentence about the low number of respondents for "expenditure"?
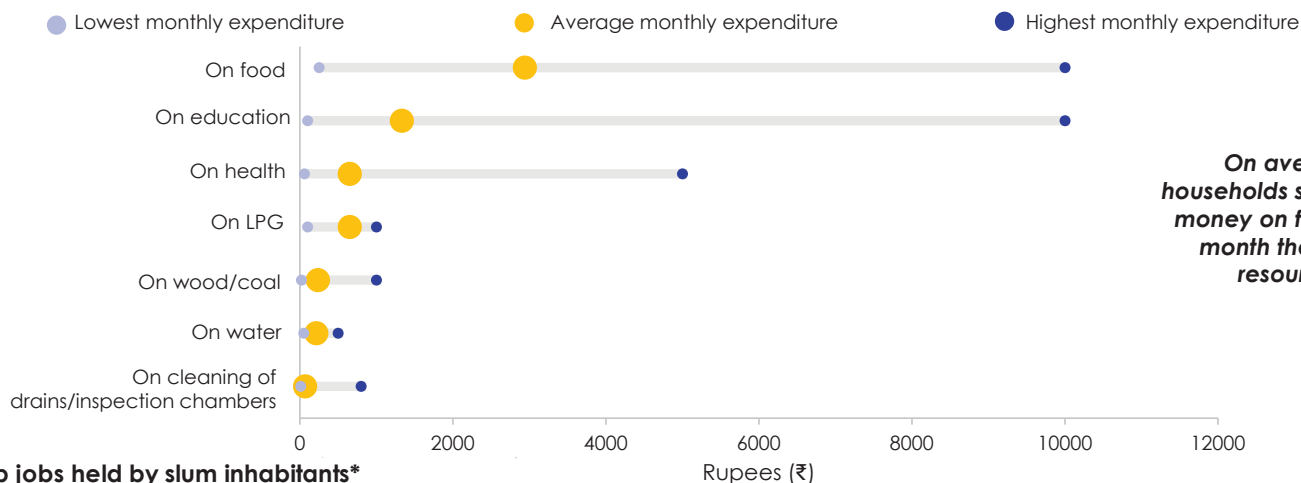
Most of the 257 respondents were female

Female 83%	Male 17%

Living environment

Handwashing practices
(257 respondents)

Before cooking	
Before eating	
After cooking	
After using toilet	
After cleaning child when they have used toilet	
Before feeding child	
After cleaning surfaces that may have animal feces on them	
After going to stores or other public spaces	
Before going to visit someone else's house	
After coming back home from someone else's house	

Majority of respondents have good handwashing practices

Practices used by the household to make water safe for drinking (257 respondents)

Strain through a cloth	
Boil	
Alum	
No treatment	
Water filter	
Let it sit and settle	
Uses treatment only for children	
Solar disinfection	

Despite poor water quality many respondents do not use any treatment

Living environment

89% of **257** homes have an inspection chamber outside of the house

11% of **257** homes have an open drain outside of the house

Frequency of cleaning inspection chamber (229 total responses)

Daily	0%
Fortnightly	67%
Weekly	6%
Monthly	88%
During the monsoon	16%
Never	0%

Frequency of cleaning open drains (28 responses)

Daily	0%
Fortnightly	4%
Weekly	4%
Monthly	50%
During the monsoon	4%
Never	39%

Cleaning responsibility for inspection chamber

22%	76%	2%

- Split between municipal worker and hired private cleaner
- Municipal worker
- Private cleaner

Cleaning responsibility for open drains

54%	46%

- Split between municipal worker and hired private cleaner
- Municipal worker
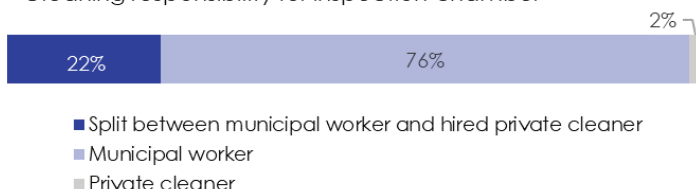
Type of toilet facility in use (257 total responses)

Improved, not shared facility	89%
Unimproved	7%
Public	3%
Shared facility	2%

Most respondents use an improved, unshared toilet facility

Cleaning practice of toilet (227 total responses)

Daily	41%
Few times a week	34%
Weekly	11%
Once or twice in two weeks	7%
Monthly once or less	6%
Don't know	1%

Most respondents clean their toilet at least a few times a week

Access to healthcare

Illness

Intro statement of some kind

95% of **104** respondents visited a **private facility** instead of a **public facility** when they had a fever with cough and cold

93% of **104** respondents sought **out-patient care** instead of **in-patient care** when they had a fever with cough and cold

89% of **104** respondents based their careseeking preferences on **location** instead of **quality** or **cost**

Maternal Health

Awareness of various MCH schemes

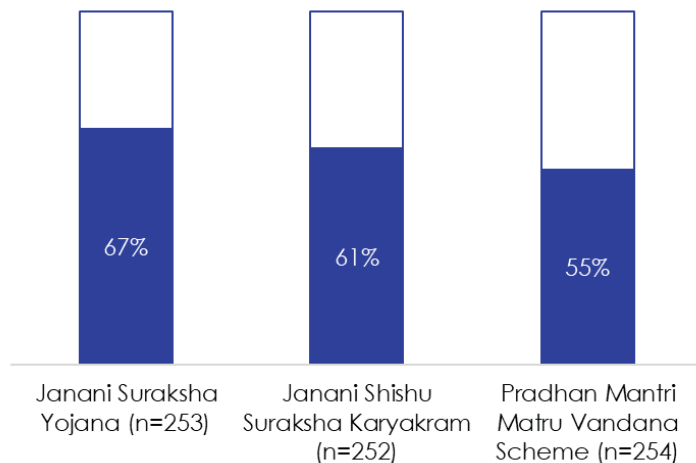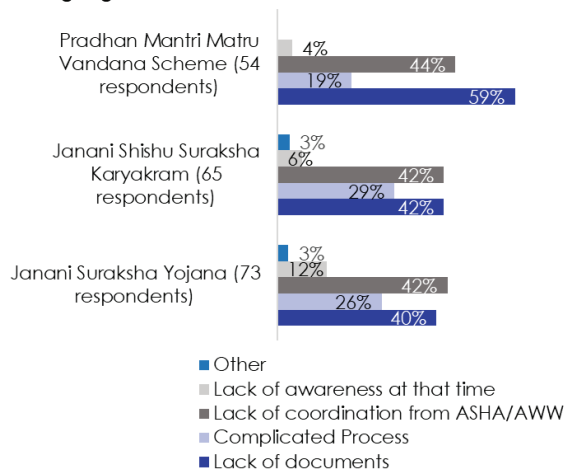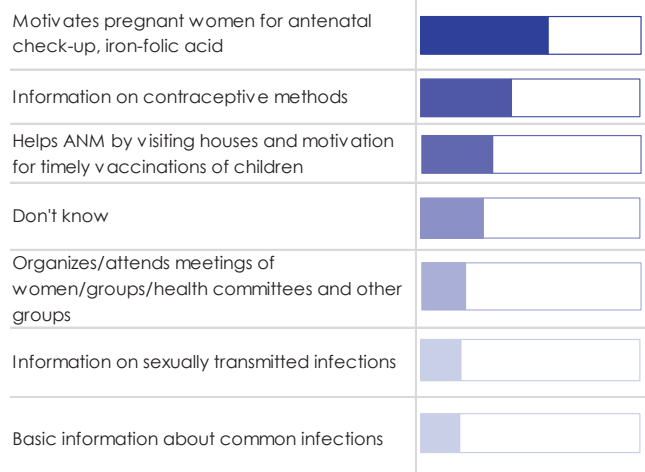| Janani Suraksha Yojana (n=253) | Janani Shishu Suraksha Karyakram (n=252) | Pradhan Mantri Matru Vandana Scheme (n=254) |
| 67% | 61% | 55% |

Reasons for not receiving MCH scheme benefits despite being eligible

Pradhan Mantri Matru Vandana Scheme (54 respondents)
- 4%
- 44%
- 19%
- 59%

Janani Shishu Suraksha Karyakram (65 respondents)
- 3%
- 6%
- 42%
- 29%
- 42%

Janani Suraksha Yojana (73 respondents)
- 3%
- 12%
- 42%
- 26%
- 40%

- ■ Other
- ■ Lack of awareness at that time
- ■ Lack of coordination from ASHA/AWW
- ■ Complicated Process
- ■ Lack of documents

Services provided by ASHA (257 respondents)

- Motivates pregnant women for antenatal check-up, iron-folic acid
- Information on contraceptive methods
- Helps ANM by visiting houses and motivation for timely vaccinations of children
- Don't know
- Organizes/attends meetings of women/groups/health committees and other groups
- Information on sexually transmitted infections
- Basic information about common infections

65% of 257 respondents say that ASHA is easily accessible

| Yes, accessible 65% | No, not accessible 20% | Don't know 16% |

Breastfeeding practices (257 respondents)

- Exclusive breastfeeding for the first 6 months
- Dense first milk (colostrum) is usually given to baby on day 1
- Water/baby food/skimmed milk/liquids/semi-liquids etc. given to babies
- Don't know
- Skimmed milk/powder baby food is better than natural breast milk

Breast feeding practices need to be strengthened in the community
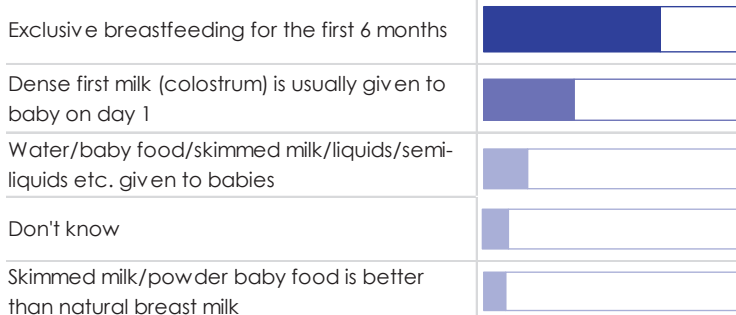
Expenditure by hospital type

	Average	Lowest	Highest
Private hospital (25 respondents)	₹ 13.931	₹ 4,000	₹ 30,000
Public hospital (90 respondents)	₹ 903	No cost	₹ 4,000

89% of **133** deliveries in the last 5 years took place at a **hospital** instead of **at home**

Distance to hospital by hospital type

	Less than 1 km	1-3 km	More than 3 km
Private hospital (25 respondents)	12%	24%	64%
Public hospital (90 respondents)	7%	14%	79%

76% of **118** hospital deliveries took place at a **public hospital** and **21%** took place at a **private hospital**

Under-5 Child health

98% of **131** children **have** received their vaccinations

Place of child vaccination (128 total respondents)

Anganwadi centre	85%
Government hospital	14%
Private Hospital/Clinic	2%

Most vaccinated children are vaccinated at an Anganwadi centre

	Average	Lowest	Highest
Healthcare expenditure for children under 5	₹ 411	₹ 100	₹ 600

56 out of **103** respondents said that their child has been sick in the past year

Is there a malnourished child in the family? (250 respondents)

No	86%
No, but I suspect they are	6%
Yes	8%

Community has a few malnourished children and few are suspected to be malnourished

Access to government schemes and services

Grievance redressal mechanism used by community members (257 total respondents)

Counselor or other political leader	
311 app	
Never lodged a complaint	
CM helpline	
Group visit to municipal corporation/department	
To nodal officer	
Through any NGO	
Don't know	

Despite having the 311 app and CM helpline available, respondents prefer to address complaints through counselors and political leaders.

Access to basic service cards (257 total respondents)

Aadhar card	
Voter ID card	

Sectors that receive the most complaints (257 respondents)

Water supply	
Electricity	
Sanitation	
Solid Waste Management	
Healthcare	
Don't know	
Traffic	

Access to social protection cards (257 total respondents)

Below poverty line card	
Ration card	
Ayushman card	

Many respondents did not have Voter ID, BPL, Ration and Ayushman card

BUILDING HEALTHY CITIES

Community brief
Sikandarabad

Participatory research: 2020-21

Sample size: 258 households

Introduction to Sikandarabad

The community is located in the Western part of the city near Kila Maidan along the state highway 27. It comes under ward no 8 and zone no 1. The community is about 40 years old, it is mostly a Muslim Community. There are 3 Anganwadis and 2 ASHA workers engaged in education and immunization of children. The slum is accessible by cement concrete road.

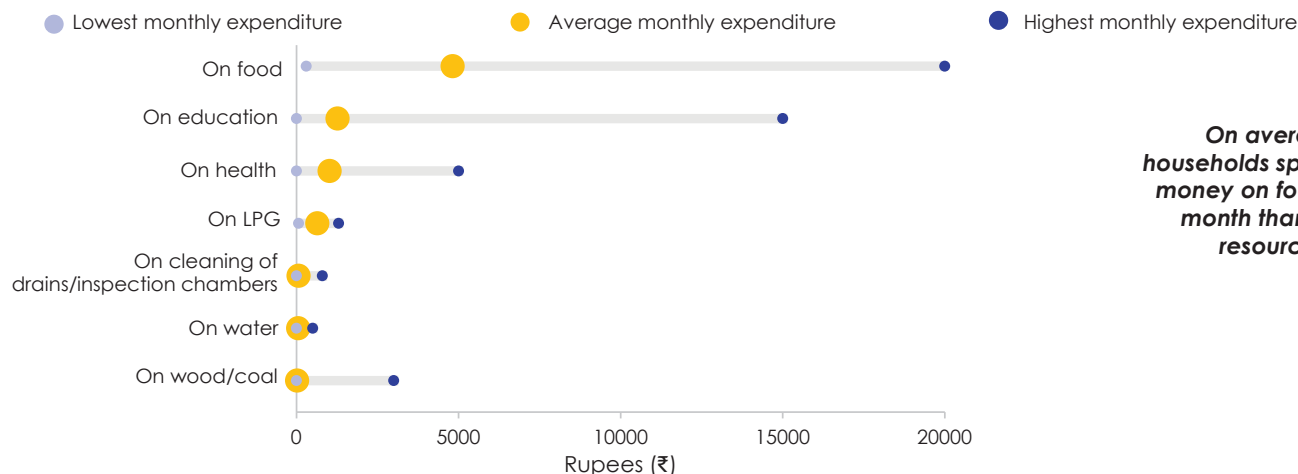| Number of households	716
Population	4000
Infrastructure	**Water Supply:** Narmada Pipeline **Sanitation:** All households have access to toilet **Solid Waste Management:** 100% door to door waste collection. Residents are segregating waste at source

Location map and layout plan of Sikandarabad.

Observations

Socio-economic profile of the community

Total monthly expenditure

- ● Lowest monthly expenditure
- ● Average monthly expenditure
- ● Highest monthly expenditure

On food
On education
On health
On LPG
On cleaning of drains/inspection chambers
On water
On wood/coal

Rupees (₹)

On average, households spend more money on food every month than other resources.

Types of jobs held by slum inhabitants (258 respondents)

Job	%
Unemployed	41%
No response	25%
Self-employed	11%
Daily wage worker	7%
Driver	5%
Autorickshaw driver	3%
Tailor	3%
Technician	2%
Mechanic	2%
Private job	1%
Hawker	1%
Government conducter	0%

41% of slum inhabitants are unemployed

	Average	Lowest	Highest
Age	39 years	18 years	84 years
Income	₹ 6,370	₹ 0	₹ 40,000
Expenditure	₹ 10,345	₹ 1,000	₹ 32,500

(165 total respondents)

Almost all of the 258 respondents were female

Female 89%	Male 11%
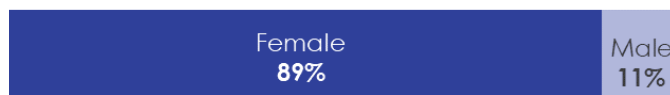
Living environment

Handwashing practices (261 respondents)

- Before cooking
- Before eating
- After using toilet
- After cooking
- After cleaning child when they have used toilet
- Before feeding child
- After coming back home from someone else's house
- Before going to visit someone else's house
- After going to stores or other public spaces
- After cleaning surfaces that may have animal feces on them

Practices used by the household to make water safe for drinking (259 respondents)

- Strain through a cloth
- Alum
- Boil
- No treatment
- Electric purifier
- Bleach/Chlorine
- Water filter
- Uses treatment only for children
- Only for patients

Living environment

47% of **261** homes have an inspection chamber outside of the house

10% of **256** homes have an open drain outside of the house

Frequency of cleaning inspection chamber (123 total responses)

Daily	1%
Fortnightly	5%
Weekly	2%
Monthly	49%
During the monsoon	37%
Never	7%

Frequency of cleaning open drains (26 responses)

Daily	0%
Fortnightly	8%
Weekly	0%
Monthly	31%
During the monsoon	54%
Never	8%

Cleaning responsibility for inspection chamber

86%	11%

2%

- Split between municipal worker and hired private cleaner
- Municipal worker
- Private cleaner

Cleaning responsibility for open drains

96%	

4%

- Municipal worker
- Private cleaner
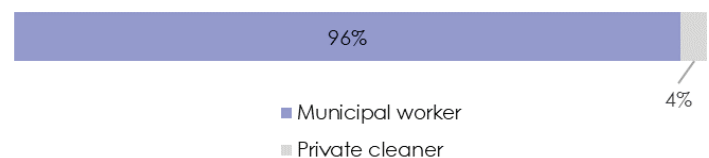
Type of toilet facility in use (260 total responses)

Improved, not shared facility	90%
Shared facility	7%
Unimproved	3%
Public	0%

Most respondents use an improved, unshared toilet facility

Cleaning practice of toilet (260 total responses)

Daily	65%
Few times a week	13%
Weekly	13%
Once or twice in two weeks	2%
No response	7%

More than half of all respondents clean their toilet on a daily basis

Access to healthcare

Illness

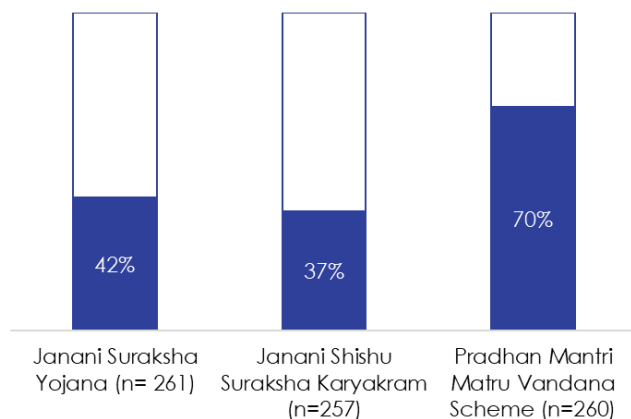**Intro statement of some kind**

87% of **62** respondents visited a **public facility** instead of a **private facility** when they had a fever with cough and cold

100% of **62** respondents sought **out-patient care** instead of **in-patient care** when they had a fever with cough and cold
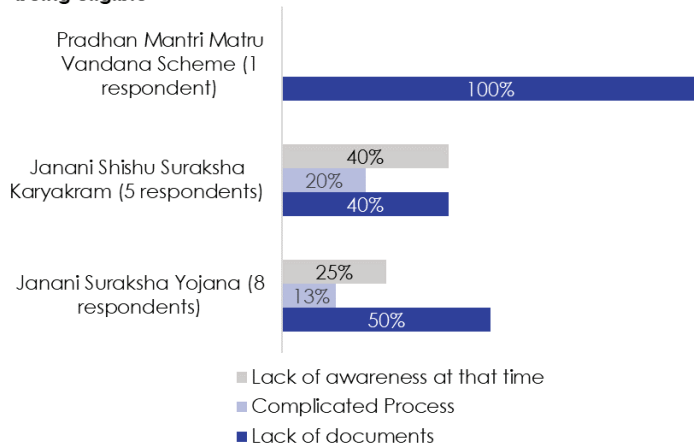
66% of **62** respondents based their careseeking preferences on **location** instead of **quality**

Maternal Health

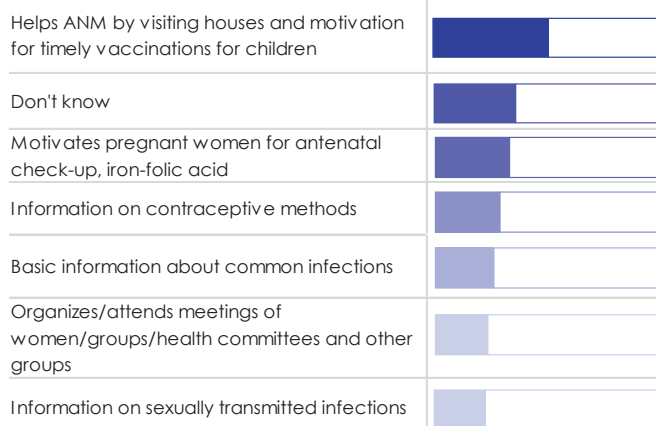**Awareness of various MCH schemes**

Janani Suraksha Yojana (n= 261) — 42%
Janani Shishu Suraksha Karyakram (n=257) — 37%
Pradhan Mantri Matru Vandana Scheme (n=260) — 70%

Reasons for not receiving MCH scheme benefits despite being eligible

Pradhan Mantri Matru Vandana Scheme (1 respondent) — 100%

Janani Shishu Suraksha Karyakram (5 respondents) — 40% / 20% / 40%

Janani Suraksha Yojana (8 respondents) — 25% / 13% / 50%

- Lack of awareness at that time
- Complicated Process
- Lack of documents

Lack of documents is the main reason behind women not receiving MCH scheme benefits

Services provided by ASHA (262 respondents)

Helps ANM by visiting houses and motivation for timely vaccinations for children	
Don't know	
Motivates pregnant women for antenatal check-up, iron-folic acid	
Information on contraceptive methods	
Basic information about common infections	
Organizes/attends meetings of women/groups/health committees and other groups	
Information on sexually transmitted infections	

60% of 262 respondents say that ASHA is easily accessible

Yes, accessible 60%	No, not accessible 17%	Don't know 23%

Breastfeeding practices (262 respondents)

Dense first milk (colostrum) is usually given to baby on day 1	
Exclusive breastfeeding for the first 6 months	
Don't know	
Water/baby food/skimmed milk/liquids/semi-liquids etc. given to babies	
Skimmed milk/powder baby food is better than natural breast milk	
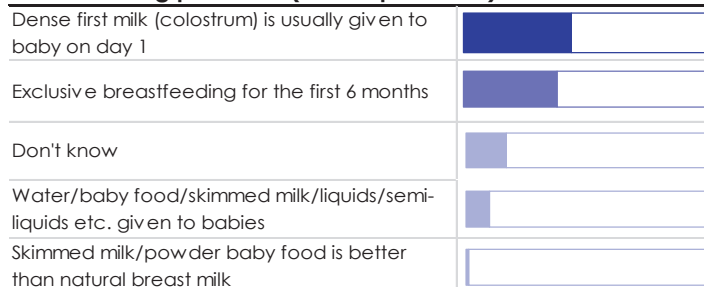
The community needs awareness on breast feeding practices

Expenditure by hospital type

	Average	Lowest	Highest
Private hospital (20 respondents)	₹ 21,618	₹ 1,500	₹ 100,000
Public hospital (19 respondents)	₹ 1,287	No cost	₹ 5,000

100% of **54** deliveries in the last 5 years took place at a **hospital** instead of **at home**

Distance to hospital by hospital type

	Less than 1 km	1-3 km	More than 3 km
Private hospital (19 respondents)	5%	16%	79%
Public hospital (20 respondents)	15%	15%	70%

Insert takeaway sentence

38% of **54** hospital deliveries took place at a **private hospital** and **36%** took place at a **public hospital**

Under-5 Child health

98% of **60** children **have** received their vaccinations

Place of child vaccination (60 total respondents)

Anganwadi centre	80%
Private Hospital/Clinic	15%
Government hospital	5%

Most vaccinated children are vaccinated at an Anganwadi centre

	Average	Lowest	Highest
Healthcare expenditure for children under 5	₹ 2,000	₹ 2,000	₹ 2,000

Only **3** out of **61** respondents said that their child has been sick in the past year

Is there a malnourished child in the family? (258 respondents)

No	98%
No, but I suspect they are	2%
Yes	< 1%

There is just one malnourished child in the community

Access to government schemes and services

Grievance redressal mechanism used by community members (260 total respondents)

Counselor or other political leader	
Never lodged a complaint	
Don't know	
311 app	
Group visit to municipal corporation/department	
CM helpline	
Through any NGO	

Despite having the 311 app available, most respondents prefer to address complaints through counselors and political leaders. However, 40% of respondents didn't use any complaint redressal mechanism at all.

Access to basic service cards (258 total respondents)

Aadhar card	
Voter ID card	

Access to social protection cards (258 total respondents)

Ration card	
Below poverty line card	
Ayushman card	

Sectors that receive the most complaints (112 respondents)

Electricity	
Sanitation	
Water supply	
Don't know	
Solid waste management	
Don't know	

Electricity, sanitation and water supply received the most complaints

Majority of the respondents have acess to basic service cards but not social protection cards

BUILDING HEALTHY CITIES

Community brief
Kadavghat

Participatory research: 2020-21

Sample size: 182 households

International Organization for Migration (IOM)
The UN Migration Agency

Introduction to Kadavghat

Kadhavghat Basti is located to the west of the city. It is a Muslim majority settlement. There is a commercial area around here. There is one Anganwadi centre in the community. Community comes under ABD area. Front part of the buildings constructed along the main road have been demolished under road widening works of Smart City project.

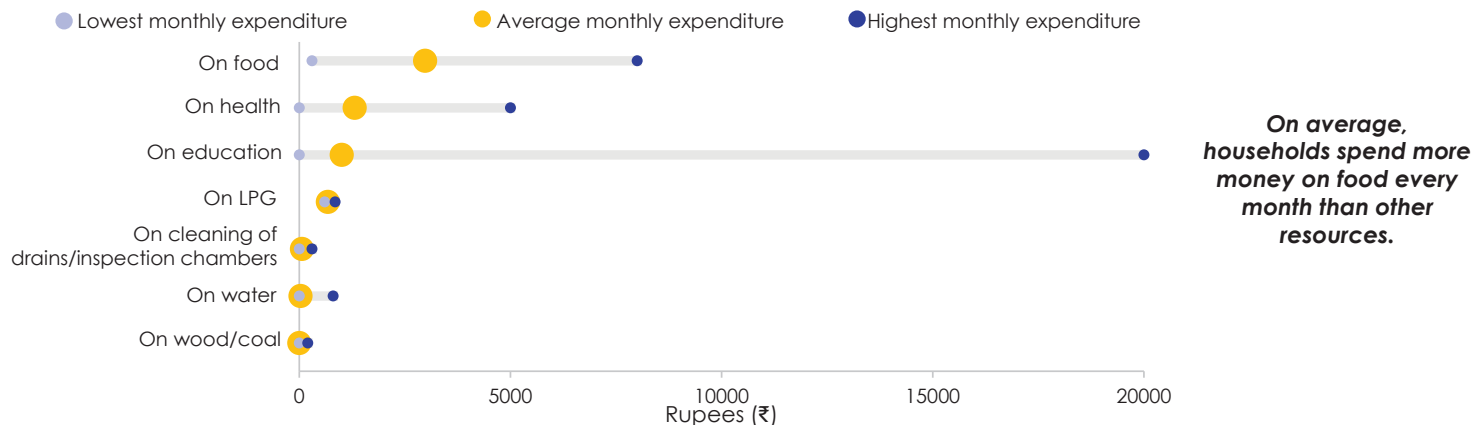|	
Number of households	308
Population	2016
Infrastructure	**Water Supply:** Narmada pipe line and 3 bore wells **Sanitation:** All households have access to toilets. **Solid Waste Management:** Waste collection vehicle comes daily but poor waste management by community people

Location map and layout plan of Kadavghat.

Observations

Socio-economic profile of the community

Total monthly expenditure

● Lowest monthly expenditure   ● Average monthly expenditure   ● Highest monthly expenditure

On average, households spend more money on food every month than other resources.

Top jobs held by slum inhabitants*
(182 respondents)

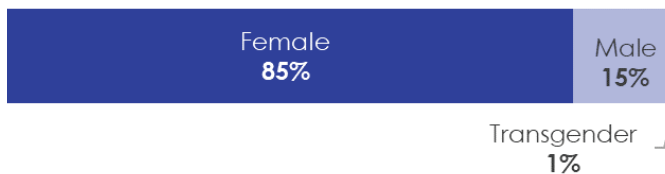|	
Daily wage worker	57%
Autorickshaw driver	9%
Housewife	8%
Tailor	5%
Self-employed	4%
Cart puller	2%
Driver	2%
Mechanic	2%
Salesman	2%

57% of slum inhabitants are daily wage laborers

*Carpenters, chefs, fruit sellers, industry workers, painters, scrap dealers, vegetable sellers, domestic workers, and tea sellers each make up 1% of respondents.

	Average	Lowest	Highest
Age	42 years	22 years	82 years
Income	₹ 12,532	₹ 1,000	₹ 25,000
Expenditure	₹ 11,750	₹ 500	₹ 25,000

(182 total respondents)

Almost all of the 182 respondents were female

Female 85%	Male 15%

Transgender 1%

Living environment

Handwashing practices
(188 respondents)

Before eating	
Before cooking	
After using toilet	
After cooking	
After coming back home from someone else's house	
Before going to visit someone else's house	
Before feeding child	
After cleaning child when they have used toilet	
After going to stores or other public spaces	
After cleaning surfaces that may have animal feces on them	

Practices used by the household to make water safe for drinking (188 respondents)

Strain through a cloth	
Alum	
Boil	
No treatment	
Electric purifier	
Bleach/Chlorine	

Living environment

54% of **188** homes have an inspection chamber outside of the house

13% of **188** homes have an open drain outside of the house

Frequency of cleaning inspection chamber (101 total responses)

Daily	0%
Fortnightly	10%
Weekly	11%
Monthly	35%
During the monsoon	38%
Never	7%

Inspection chambers are cleaned mostly every month and during monsoon

Frequency of cleaning open drains (24 total responses)

Daily	0%
Fortnightly	0%
Weekly	17%
Monthly	17%
During the monsoon	54%
Never	13%

Open drains are cleaned during the monsoon

Cleaning responsibility for inspection chamber

7%	74%	19%

- Split between municipal worker and hired private cleaner
- Municipal worker
- Private cleaner

Cleaning responsibility for open drains

8%	75%	17%

- Split between municipal worker and hired private cleaner
- Municipal worker
- Private cleaner
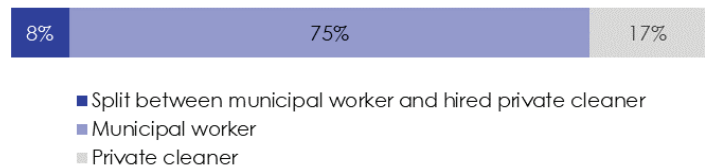
Community is hiring private cleaners for cleaning open drains

Type of toilet facility in use (188 total responses)

Improved, not shared facility	85%
Shared facility	7%
Unimproved	7%
Public	1%

Most respondents use an improved, unshared toilet facility

Cleaning practice of toilet (188 total responses)

Daily	62%
Few times a week	28%
Weekly	4%
Once or twice in two weeks	4%
Monthly once or less	2%
No response	1%

More than half of all respondents clean their toilet on a daily basis
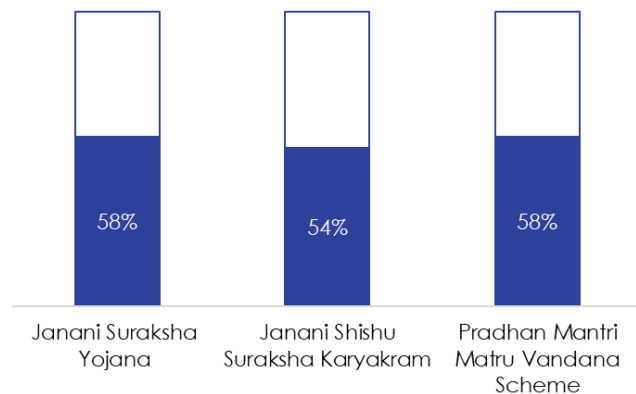
Access to healthcare

Illness

99% of **182** respondents visited a **private facility** instead of a **public facility** when they had a fever with cough and cold

100% of **93** respondents sought **out-patient care** instead of **in-patient care** when they had a fever with cough and cold

84% of **93** respondents based their careseeking preferences on **location** instead of **quality**
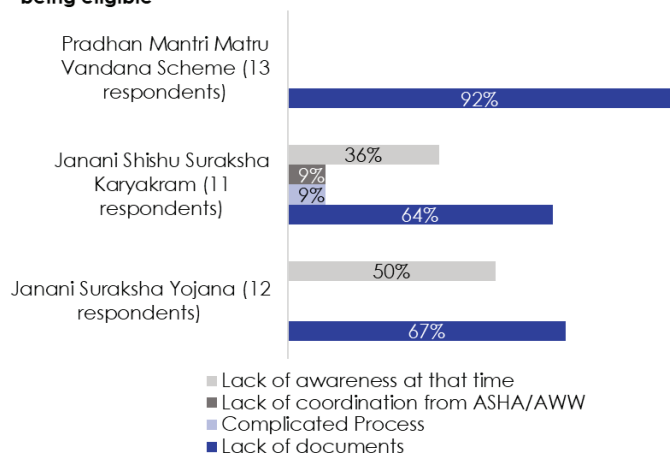
Maternal Health

Awareness of various MCH schemes (184 respondents)

- Janani Suraksha Yojana: 58%
- Janani Shishu Suraksha Karyakram: 54%
- Pradhan Mantri Matru Vandana Scheme: 58%

Almost half of the respondents were unaware of the MCH schemes

Reasons for not receiving MCH scheme benefits despite being eligible

- Pradhan Mantri Matru Vandana Scheme (13 respondents): 92%
- Janani Shishu Suraksha Karyakram (11 respondents): 36%, 9%, 9%, 64%
- Janani Suraksha Yojana (12 respondents): 50%, 67%

Legend:
- Lack of awareness at that time
- Lack of coordination from ASHA/AWW
- Complicated Process
- Lack of documents

Lack of documents is the main reason why women are unable to receive MCH scheme benefits

Services provided by ASHA (184 respondents)

- Motivates pregnant women for antenatal check-up, iron-folic acid
- Don't know
- Information on contraceptive methods
- Helps ANM by visiting houses and motivation for timely vaccinations of children
- Basic information about common infections
- Information on sexually transmitted infections
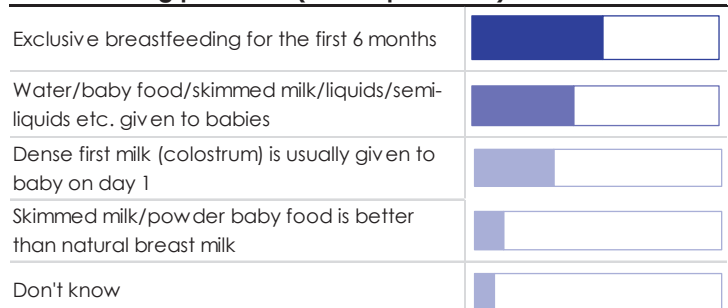- Organizes/attends meetings of women/groups/health committees and other groups
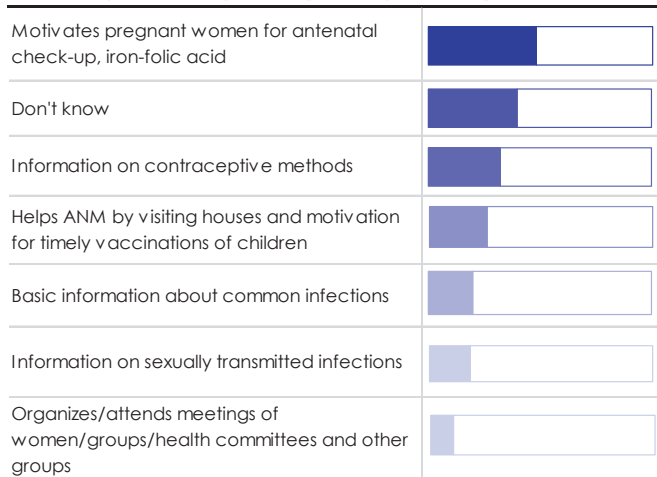
Almost half of the respondents were unaware of the services provided by ASHA

47% of 184 respondents say that ASHA is easily accessible

| Yes, accessible 47% | No, not accessible 44% | |

Don't know 9%

Breastfeeding practices (184 respondents)

- Exclusive breastfeeding for the first 6 months
- Water/baby food/skimmed milk/liquids/semi-liquids etc. given to babies
- Dense first milk (colostrum) is usually given to baby on day 1
- Skimmed milk/powder baby food is better than natural breast milk
- Don't know

The breastfeeding practices of the community need improvement

Expenditure by hospital type

	Average	Lowest	Highest
Private hospital (5 respondents)	₹ 10,600	₹ 6,000	₹ 150,000
Public hospital (25 respondents)	₹ 470	No cost	₹ 1,000

94% of **32** deliveries in the last 5 years took place at a **hospital** instead of **at home**

Distance to hospital by hospital type

	Less than 1 km	1-3 km	More than 3 km
Private hospital (5 respondents)	40%	60%	0%
Public hospital (25 respondents)	4%	40%	56%

83% of **30** hospital deliveries took place at a **public hospital** and **17%** took place at a **private hospital**

Under-5 Child health

97% of **33** children **have** received their vaccinations

Place of child vaccination (33 total respondents)

Anganwadi centre	85%
Government hospital	9%
Private Hospital/Clinic	3%

Most vaccinated children are vaccinated at an Anganwadi centre

	Average	Lowest	Highest
Healthcare expenditure for children under 5	₹ 2,263	₹ 100	₹ 15,000

20 out of **26** respondents said that their child has been sick in the past year

Is there a malnourished child in the family? (184 respondents)

No	97%
Yes	3%

Majority did not have a malnourished child in the family

Access to government schemes and services

Grievance redressal mechanism used by community members (188 total respondents)

- Counselor or other political leader
- 311 app
- Never lodged a complaint
- Don't know
- CM helpline
- Group visit to municipal corporation/department
- Through any NGO

Despite having the 311 app and CM helpline available, more respondents prefer to address complaints through counselors and political leaders.

Access to basic service cards (182 total respondents)

- Aadhar card
- Voter ID card

Sectors that receive the most complaints (124 respondents)

- Electricity
- Solid waste management
- Water supply
- Sanitation
- Healthcare
- Traffic
- Don't know

Despite sanitation issues noted earlier very less people complained about it

Access to social protection cards (182 total respondents)

- Ration card
- Below poverty line card
- Ayushman card

Majority of the respondents had basic service card but not the social protection cards

BUILDING HEALTHY CITIES