



**ASSESSMENT OF EFFECTIVENESS OF COMMUNITY MONITORING AND ITS IMPACT ON WATER AND
SANITATION SERVICES: (A SPECIAL REFERENCE WITH PATNA MUNICIPAL CORPORATION)**

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ABSTRACT

The purpose of the present study was to investigate the significant correlation between urban-based community and rural- based community over availability and accessibility to water and sanitation services on account of community monitoring process. The present study also tried to investigate the significant co-relation between urban-based community and rural- based community over awareness and utilization of water and sanitation services on account of community monitoring process. It was believed that there was no significant difference between urban based community and rural based community over availability, accessibility to, awareness and utilization of water and sanitation services on account of community monitoring. In this context, it was important to know how community monitoring affect such variables. For this, 200 respondents were randomly selected, 100 from rural setting and 100 from urban setting, for the present study. To investigate and establish relationship between dependent and independent variables, ANNOVA two-tailed test were administered. The study found that there is a significant correlation between rural and urban-based community over availability and accessibility to water and sanitation services on account of community monitoring($F > F\text{-critical}$ i.e. $18.86 > 3.86$, $P < 0.05$ i.e. $0.000017 < 0.05$). Similarly, there is a significant correlation between rural and urban-based community over awareness and utilization of water and sanitation services on account of community monitoring ($F > F\text{-critical}$ i.e. $13.12 > 3.86$, $P < 0.05$ i.e. $0.00032 < 0.05$).

The study thus explains that the availability and accessibility to water and sanitation services among rural-based community is in critical condition comparing to urban-based community.

KEY WORDS: Community Monitoring, Water Sanitation Services, Urban, Rural

Community-based monitoring (CBM) is a form of public oversight, ideally driven by local information needs and community values, to increase the accountability and quality of social services such as health, development aid, or to contribute to the management of natural resources. Within the CBM framework, members of a community affected by a social program or environmental change track this change and its local impacts, and generate demands, suggestions, critiques and data that they then act on, including by feeding back to the organization implementing the program or managing the environmental change.

CBM aims not only to generate the appropriate information for high quality service also seeks to strengthen local decision-making, public education, community capacity and effective public participation in local government. Ultimately, CBM is a tool to facilitate more inclusive decision-making on issues that are important to members of a community, including increasingly complex aspects of social, economic and environmental factors.

Community based monitoring promotes community participation that ultimately influences the water and sanitation services. Community based monitoring provides a better platform for effective and supportive supervision of all schemes run and promoted by government based on allocating water and sanitation services to community peoples. Community based monitoring may be limited if there is least opportunities for community people for community participation. Various factors directly or indirectly influence the community monitoring. The availability and accessibility to water and sanitation services depends upon the extent at which community is enough aware of water and sanitation services, have positive attitudes towards betterment of water and sanitation services and consider the water and sanitation services as an important services for their healthy life.

REVIEW OF LITERATURE

Community monitoring describes active involvement by people in civic and developmental organisations, political parties and local government, with the purpose of influencing decisions that affect their lives (Roodt, 2001:470). Rahman (1993:150) put forward the idea that participation is the exercise of people's power in thinking and acting, as well as in controlling their action in a collective framework.

This is a form of evaluation. It is performed while the project is being implemented, with the aim of improving the project design and functioning, while in action. It is an internal project activity designed to provide constant feedback on progress of a project, the problems it is facing, and the efficiency with which it is being implemented. Participatory monitoring and evaluation is a process on account of which stakeholders at various levels engage in monitoring and evaluating a particular project/program or policy, share control over the content, the process and the results of monitoring and evaluation activity and engage in taking or identifying corrective actions. Participatory

monitoring and evaluation focus on the active engagement of all project stakeholders. It is geared towards not only measuring the effectiveness of a project, but also towards building ownership and empowering beneficiaries, building accountability and transparency and taking corrective actions to improve performance and outcomes (Mulwa, 2008). According to Narayan (1995), participatory project monitoring and evaluation brings together both researchers and stakeholders, such as farmers, government officials and extension workers, to monitor and assess development activities. Participatory monitoring and evaluation are extremely important for learning about the achievement /deviation from the original concerns and problems faced by local development projects/programs being implemented so that corrective measures can be taken in time.

RATIONALE OF THE STUDY

Community monitoring is a bottom-up approach sustained by participatory processes. The documentation and analysis is carried- out by citizens themselves through social mobilization, Monitoring results are used to demand concrete action to bring about changes in qualitative and quantitative aspect of service improvements and equitable distribution of resources.

Providing water and sanitation to India's millions is a challenging task. With over 20 million people without access to safe water supply and 100 million without safe sanitation, the sheer numbers indicate the massive effort required to provide these basic services to the people of the country. Just providing access, however, will not solve the problem unless the issues of quality and adequacy are also addressed. The minimum needs should be met and the quality of the services provided should be acceptable.

OBJECTIVES

1. To analyze the impact of community monitoring over availability and accessibility to water and sanitation services
2. To assess the community peoples' awareness of community monitoring
3. To assess the behavioral aspects of community peoples over optimum utilization of water and sanitation services through the effective community participation

HYPOTHESES

1. There is no significant co-relation between urban-based community and rural- based community over availability and accessibility to water and sanitation services on account of community monitoring process
2. There is no significant co-relation between urban- based community and rural- based community over awareness and utilization of water and sanitation services on account of community monitoring

MATERIALS AND METHODS

SAMPLE

The participants of the present study comprised 200 respondents including 100 respondents from rural-based community and 100 respondents from urban-based community. In both cases, 50% of respondents were male and 50% were female employees. Respondents were selected through simple random method. Marital status, age, socio-economic status, income level were collected as demographic information of the participants.

RESEARCH DESIGN

In this research, quantitative and qualitative survey designs were used. This because of the research was based on the views and opinion along with existing status of problem. Pre Structured schedule were formed to collect information and Focused group discussions were conducted to gather views and opinion from community population.

TARGET POPULATION

The research target population is 02 urban and 02 rural geographies of Patna Municipal Corporation Patna in Bihar were identified to have a comparative assessment of the effectiveness of community monitoring and its impact on water and sanitation service.

METHODS OF DATA ANALYSIS

Collection of primary data is followed by arrangement of data before analyzing or interpreting their implications. Before carrying out-processing and analysis, the raw data were coded according to Likert 5 scale and arranged according to their respective themes. The ANNOVA two-tailed statistical tool has been administrated to analyze the primary data and subsequently to test the research hypothesis. The ANNOVA two-tailed was selected to test hypothesis, as researcher had to establish comparative relationship among more than one dependent and independent variables.

RESULT AND DISCUSSION

The ANNOVA two-tailed with replication method has been adopted to establish relationship between said variables. The mean and standard deviation has been kept in view while establishing relationship between variables.

The mean value of response, from rural based community, under availability of water and sanitation services is 1.54. It explains that the availability of water and sanitation services among rural community people is in critical condition. Mean value of response, from urban-based community, under element of availability of water and sanitation services is 3.52. It explains that the availability of water and sanitation among urban community people is in better condition comparing to rural community people.

SUMMARY	Availability of water and sanitation services	Accessibility to water and sanitation services	Total
Rural			
Count	100	100	200
Sum	154	185	339
Average	1.54	1.85	1.695
Variance	0.533737	0.325152	0.431533
Urban			
Count	100	100	200
Sum	352	375	727
Average	3.52	3.75	3.63
Variance	0.716768	0.804444	0.83005
Total			
Count	200	200	
Sum	506	560	
Average	2.53	2.80	
Variance	1.607136	2.326407	

ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Sample	535.9225	1	535.9225	900.6719	0.000000154	3.865048001
Columns	4.2025	1	4.2025	7.062725	0.008189029	3.865048001
Interaction	11.2225	1	11.2225	18.86054	0.0000178	3.865048001
Within	235.63	396	0.595025			
Total	786.9775	399				

F value > F critical (18.86 > 3.86) value and p-value (0.000017) is < 0.05. Hence, above-mentioned null hypothesis is rejected and it explains that there significant interaction exists between rural and urban-based community over availability and accessibility of water and sanitation services on account of community monitoring process.

	Awareness of water and sanitation services	Utilization of water and sanitation services	Total
Rural			
Count	100	100	200
Sum	274	254	528
Average	2.74	2.54	2.64
Variance	1.527677	2.271111	1.899899
Urban			
Count	100	100	200
Sum	328	395	723
Average	3.28	3.95	3.615
Variance	1.173333	0.795455	1.092236
Total			
Count	200	200	
Sum	602	649	
Average	3.01	3.245	
Variance	1.416985	2.025101	

Source of Variation	SS	Df	MS	F	P-value	F crit
Sample	95.0625	1	95.0625	65.92891	0.00000012	3.865048
Columns	5.5225	1	5.5225	3.830032	0.051044166	3.865048
Interaction	18.9225	1	18.9225	13.12336	0.000329575	3.865048
Within	570.99	396	1.441894			
Total	690.4975	399				

From the above table, F value > F critical (13.12 < 3.86) value and p-value(0.00032) is < 0.05. Hence, above-mentioned null hypothesis is rejected and it explains that there significant interaction exists between rural and urban-based community over awareness and utilization of water and sanitation services on account of community monitoring process.

It is interpreted that mean value of response, from rural based community, under element of awareness of water and sanitation services is 2.74. It explains that there is lack of proper awareness about water and sanitation services among rural community people. Mean value of response, from

urban-based community, under element of awareness of water and sanitation services is 3.28. It explains that the awareness about water and sanitation services among urban community extending from neutral to good condition. It is also interpreted that mean value of response, from rural based community people, under element of accessibility to water and sanitation service, is 2.54. It explains that the utilization of water and sanitation services among rural community people is very limited. Mean value of response, from urban-based community, under element of utilization of water and sanitation services, is 3.95. It explains that the utilization of water and sanitation services among urban community people has much increased comparing to rural community.

CONCLUSION

As pointed out by the researchers cited in the literature consulted on the topic, participation is one of the core principles of the people-centered approach in development. It is argued that participation is a collective process by which neighborhoods; villages, communities, and ultimately the nation-state prepare themselves not only to adjust to change, but also to direct change. The results of this research indicated that the community members who were supposed to benefit from the water and sanitation schemes were not fully involved in such schemes. The majority of the respondents claimed that they were not part of community monitoring body. Not only does participation enhance empowerment and ownership but also the beneficiaries go through an experience of positive change, where they learn from their mistakes and complete the cycle by implementing what they have learnt. Shortly it can be said that community monitoring prepares base for successful implementation of any community based development schemes. The study indicated that there was worst condition of availability of water and sanitation services in rural community. Government has run various schemes on water and sanitation services but still community people are unable to get full benefit from such schemes. They were unable to identify if they were taking contaminated water or not. The government has run various schemes on formation of toilets but availability of toilets was found very few in numbers. The existing community monitoring body were not enough aware for ensuring availability and accessibility to water and sanitation services. The rural community people were also not much aware of community participation and monitoring. Majority of community peoples from rural community complained that existing community monitoring body, i.e gram mukhiya and other community representatives did not take desirable step to ensure better availability of water and sanitation services. The study also revealed that status of community monitoring in urban area was not satisfactory. The problem of water lodging over streets was quite common as responded by urban community populations. The urban community responded that existing community monitoring body failed in ensuring proper sewage services in locality and due to

improper monitoring the quality of sanitation services has dropped rapidly. There was not community toilets found in rural community and in worst condition in urban locality. The community toilets in urban locality were either non-functional or damaged. The respondents complained that they had asked their ward committees member to renovate it but they were most of time non-responsive. The study concluded that there was lack of community participation not only in rural but in urban area also. The main reason behind it was lack of awareness among community people about how community participation might play a vital role in ensuring better water and sanitation services.

ETHICAL ISSUES

While collecting the data the respondents were handled carefully and the information they offered was treated confidentially protecting the identity of the respondents. Any data collected from respondents were handled carefully and the respondents were handled confidentially safeguarding the identity of the respondent. When collecting the data the respondents were not forced to give information in favor of the researcher, the respondents were expected to give information freely and willingly. More so, the researcher did not bribe the respondents so that they provide data as this introduces bias in the research.

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