# Availability Of Toilet Facility And Its Use And Misuse In Bikrampur Gram Panchayat, Simlapal C.D. Block, Bankura, West Bengal

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Abstract: In India, more than 53% population defecates in open space. Keeping the importance of toilet and to decrease the accelerating rate of open defecation, Government of India has taken several programmes. Swachch Bharat Mission (2014) is one of such programmes, which has been taken for making India open defecation free by 2019.

From the empirical study, in Bikrampur Gram Panchayat shows, About 17.44% household have toilet facility within premises, but, due to faulty design of toilet and low level of awareness only 9.95% household use toilet properly. More than 90% household members used to defecate in open areas. Whereas, members of more than 78% household and 22.89% household are using mobile phone and or Colour T.V, respectively. Construction of a toilet perceive as a home improvement not as health intervention. The role of Swachh Bharat Mission (2014) has been facing a challenge for getting success in sanitation issues in this area.

Keywords: Open Defecation, Misuse of Toilet, Sanitation, Swachh Bharat Mission.

#### I. INTRODUCTION

It is shocking to note that, more than 53% of India's population defecates in adjacent open space, which, in consequence, leads to children for exposing to faecallytransmitted infections (Chambers & Medeazza, 2013). Low sanitation coverage could be due to lack of affordable sanitation technology and awareness or motivation (Jha, 2003). Keeping the importance of toilet, Prime Minister of India, Mr. Narendra Modi, has focused that toilets should be prioritized over temples (pehle shauchalaya, phir devalaya), (Doron & Jeffrey, 2014). With due importance on sanitation as well as for decreasing the accelerating rate of open defecation, Government of India has taken several programmes after independence, such as Central Rural Sanitation Programme (CRSP, 1986) Total Sanitation Campaign (TSC, 1999), Nirmal Gram Puraskar(NGP, October, 2003), Nirmal Bharat Abhiyan (NBA, April, 2012), and Swachh Bharat Abhiyan (SBA, October, 2014) etc. The SBA has been formed to make India Open Defecation Free (ODF) by 2019 through construction of individual, cluster and community toilets, to coincide with Mahatma Gandhi's 150th birth anniversary. It is the fact that, non-availability of toilets has not been due to economic reasons but because of the lack of awareness about the benefits, as, more people aware to use televisions, radio or mobile phone rather using toilet (Gupta and Pal, 2008). On the other hand, it is also a fact that availability of toilet does not always mean that it is used or maintained (MDWS, GoI and UNICEF, 2012). No subsidized toilet programme in the world that has been successful, as people are used to shitting in the open except using toilet (Coombes, 2010). Sometimes, poor initial planning processes have been implicated in the high failure rate of rural water and sanitation development projects (Barnes et al., 2011)

Unhygienic disposal of excreta will greatly increase the risk of transmission of various types of infectious diseases (Feachem, 1977, Rajgire, 2013, Satpathy, 2014 & Vortmann et al., 2015). In India, lack of awareness about sanitation and

better hygiene practices, also results in unnecessary expenditure on health and loss of income because of productive days wasted due to sickness (Gupta & Pal, 2008,) Improved toilet facility reduces the risk of diarrhea (Komarulzaman et al., 2016). Not only diseases burden, but also, the affects of sanitation have a large impact on society (Gage, 2012). Poor sanitary conditions of toilets, and long travel distance and wait times, do not support the human dignity of the individual (Arku, 2013). The rape and murder of two teenage girls in Uttar Pradesh (May, 2014) has put the focus on lack of access to private toilets. Lack of toilet, women and girls have to go outside to defecate. This makes them vulnerable to sexual violence (Sen, 2015).

#### II. STUDY AREA

Bikrampur Gram Panchayat (G.P.) lies between 22°50′22″N to 22°55′16″N and 87°0′E to 87°06′E, under the jurisdiction of Simlapal C.D. Block of Bankura District in West Bengal (Fig. No. 01). The G.P. consists of 28 populated mouzas (Those are- Pukhuria, Birsingpur, Bikrampur, Krishnapur, Kathjuria, Harintuli, Kaniabali, Bara hetyagera, Gorakata, Pathakata, Bhudrubaid, Bara Makarkol, Asna, Dhanisukni, Ambakra, Kantasola, Bhangabandh, Kalabati, Nimaipur, Sirsha, Kumardoba, Dhabani, Kallaicha, Manipur, Talda, Parulia, Bardi, and Jarisha) with 4583 households.



Figure 1

#### III. OBJECTIVES

The research study has been focused on the following objectives,

- ✓ To understand the rate of open defecation.
- ✓ To show availability of toilet facility by self funding as well as govt. scheme.
- ✓ To examine the responsible causes for not using as well as misusing of toilet.
- ✓ To find out the level of success as well as failure of Government sanitation related scheme.

#### IV. MATERIALS AND METHODS

The primary information has been prepared through indepth door to door survey by selecting 2765 houses (60% of total households, i.e. 4583) from all populated mouzas (28) of Bikrampur Gram Panchayat, by using a set of structured questionnaire concerned to the topic through stratified random sampling. The secondary data source includes- Census of India reports (2001 and 2011), Gazetteer of Bankura District (1995), and relevant maps (collected from different Government Office), various books, journals, research reports, and web based information etc.

Collected information has been quantified, analyzed and represented by suitable statistical techniques (such as, composite score analysis, regression and correlation analysis, 't' test) and by using various related software like- Microsoft Office Word 2007, Microsoft Office Excel 2007, MapInfo Professional 7.0 etc.

#### V. RESULT AND DISCUSSION

PRACTICE OF OPEN DEFECATION: In the study area practice of open defecation is very common. Lack of toilet facility, not use of existing toilet, unaware about the adverse impact of open defecation are responsible factors for this practice. Members of more than 90% households are habituated to defecate in adjacent open space (Fig. No.02). About 17.44% household has toilet facility, wherein, members of 9.55% household are not using toilet, due to not satisfaction of the structure of the latrine or habituated to defecate in the open for their own choice (Fig. No.11, and Fig. No.04). Some mouzas, like-Bhudrubaid, Kantasola, Bardi, Manipur, Ambakra, have fully defecated (100%) in the open areas, whereas, lowest number of open defecation have been recorded in Krishnapur mouza (71.43%). The relationship between availability of toilet facility and practice of open defecation is very high (r=0.92) (Fig. No. 03), where, calculated't' value= 11.96 for 26 (28-2) degree of freedom, which is higher than tabulated value i.e. 2.78 at 1% level of significance. So, it can be said that availability of toilet facility can reduce the rate of open defecation.

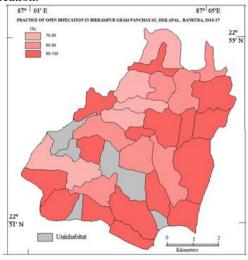
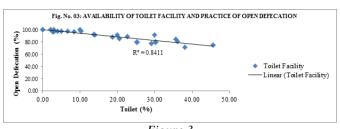


Figure 2



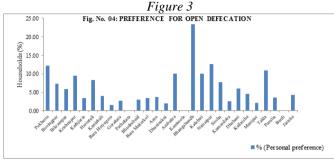


Figure 4

AVAILABILITY OF TOILET FACILITY: In Bikrampur Gram Panchayat, only 17.44% household members have toilet facility, mouza wise availability of toilet facility show the pathetic scenario of sanitation (Fig. No. 05). People are using mobile phone, and or colour TV, rather using toilet (Fig. No. 06), Mouzas like, Kantasola and Bardi have no toilet facilities, but, 72.73% and 52.75% household members are using mobile phone and 13.64% and 13.19% household members are using colour TV respectively from Kantasola and Bardi mouza. Pukhuria Mouza has the highest toilet cover (45.61%). (Fig. No.05). Though, availability of toilet facility does not infer it is being used or maintained. People are less aware about the utility of individual household latrine; they are used to choice for open defecation.

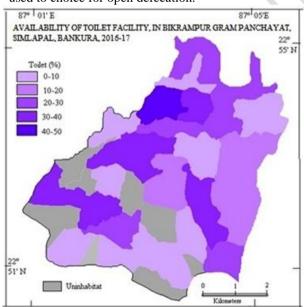


Figure 5

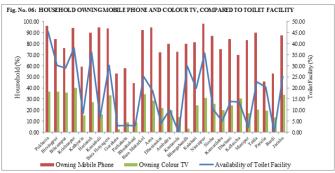
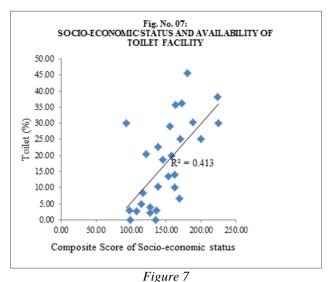


Figure 6

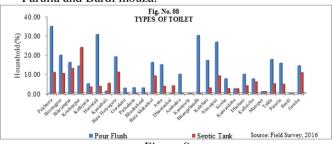
SOCIO-ECONOMIC STATUS AND AVAILABILITY OF *TOILET* FACILITY: Socio-economic status availability of toilet facility are directly related within the area, (Fig. No. 07). To show the socio-economic strength, socio-economic factors have been chosen, including- Level of income, agricultural land occupancy, educational achievement, dwelling unit, household materials, availability of toilet facility etc., by putting weightage value on socio-economic factors, mouza wise composite score has been prepared (Table No. 01). The socio-economic relationship between status availability of toilet facility is positive, where r=0.64, and calculated 't' value= 4.24 for 26 (28-2) degree of freedom, which is higher than tabulated value i.e. 2.78 at 1% level of significance. So, here, socio-economic status is directly related with availability of toilet facility.

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Mouza	Composite Score (Socio-economic Status)	Toilet (%)
Pukhuria	179.96	45.61
Birsingpur	187.92	30.21
Bikrampur	155.94	29.02
Krishnapur	223.90	38.10
Kathjuria	117.29	8.47
Harintuli	172.78	36.11
Kaniabali	168.53	6.67
Bara Hetyagera	224.13	30.16
Gorakata	107.50	2.78
Pathakata	136.67	3.03
Bhudrubaid	97.35	2.94
Bara Makarkol	199.44	25.17
Asna	145.35	18.72
Dhanisukni	127.60	4.00
Ambakra	162.00	10.00
Kantasola	135.00	0.00
Bhangabandh	93.17	30.00
Kalabati	157.57	20.00
Nimaipur	163.85	35.66
Sirsha	137.95	10.26
Kumardoba	114.50	5.00
Dhabani	162.00	14.00
Kallaicha	153.33	13.64
Manipur	127.47	2.11
Talda	138.15	22.69
Parulia	121.45	20.48
Bardi	98.90	0.00
Jarisha	170.09	25.18

Table 1



**TYPES** AND**FUNDING** OFINDIVIDUAL HOUSEHOLD LATRINE: People of Bikrampur Gram Panchayat have been using mainly two types of toilet; -Pour flush pit (12.18%) and Septic tank (5.26%), (Fig. No.08). Within the area, 7.35% toilet has been built by Swachh Bharat Mission (SBM) and 1% toilet has been made by Nirmal Bharat Abhiyan (NBA)Scheme. (Fig. No.09). There are spatial difference within the mouzas have also been found regarding the level of success for making toilet under the schemes (Fig. No.09). At Bhangabandh mouza 28.33% toilet has been built by Swachh Bharat Mission (SBM) scheme, on the other hand mouzas like-Pathakata, Bhudrubaid, Dhanisukni, Ambakra, Kantasola, Manipur and Bardi has no toilet under SBM scheme. Highest percentage of toilet (5.35%) by NBA scheme has been covered at Asna mouza. There are no toilet under NBA scheme at Kathjuria, Kaniabali, Bara Hetyagera, Gorakata, Pathakata, Baramakarkol, Dhanisukni, Ambakra, Kantasola, Bhangabandh, Kalabati, Sirsha, Kumardoba, Dhabani, Manipur, Talda, Parulia and Bardi mouza.



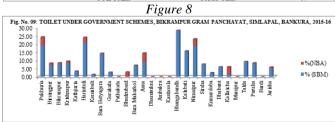
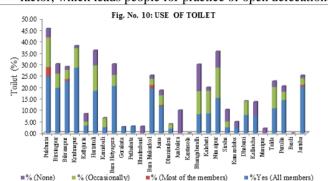


Figure 9

✓ USE AS WELL AS MISUSE OF TOILET: High rate of open defecation (more than 90%) has been recorded due to unavailability of toilet facility and sometimes due to misuse of toilet. The time based use of toilet and its

spatial difference among mouzas show the pathetic scenario of sanitation (Fig. No. 10). At Krishnapur mouza, 28.57% household members use toilet in time of defecation. People of Bhudrubaid, Ambakra, and Manipur mouzas having toilet facility 2.94%, 10% and 2.11 respectively, are not using toilet in time of defecation, rather prefer to go outside due to faulty design of toilet, as per their understanding (Fig. No. 04) and use of toilet as improvement (Fig. No.13) rather health intervention. The relationship between faulty design of toilet and use of toilet shows the positive relationship (r=0.77) (Fig. No. 12) where, calculated 't' value= 6.13 for 26 (28-2) degree of freedom, which is higher than tabulated value i.e. 2.78 at 1% level of significance. So, it can be said that faulty design of funding toilet reasonable factor, which leads people for practice of open defecation.



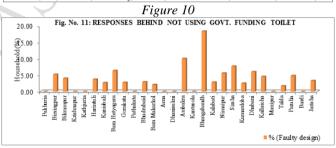


Figure 11 Fig. No. 12: FAULTY DESIGN OF TOILET AND NO ONE USE 3 15.00 Foilet 10.00 Çe, 5.00  $R^2 = 0.6055$ Linear (No one use toilet) One 0.00 5.00 10.00 15.00 20.00 ž Faulty Design (%)

Figure 12

Figure 13

## VI. CONCLUSION

From the empirical study, it can be stated that, people, due to low level of awareness, choice for open defecation.

People are using toilet for different purposes. Swachh Bharat Mission cannot be achieved success without people active participation. Sometimes, penalty chart may be prepared for those persons who have toilet facility, but not using toilet for the purposes. Health sector also require giving equal importance to preventive healthcare interventions like promotion of safe hygiene practices and proper sanitation. Only thus, Mahatma Gandhi's dream on sanitation will be fulfilled.

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