Case Study

SWACHHA BHARAT GRAMIN: A BUDGET ANALYSIS OF INDIA'S SANITATION PROGRAM, ODISHA STATE

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ABSTRACT

This paper examines changes in spending patterns of Indian Government in the Ministry of Drinking Water & Sanitation for the period 2013-14 till 2015-16 and the thrust moving from drinking water to sanitation; it also examines the expenditure patterns of the different components in rural sanitation in the state of Odisha specifically. It traces the trajectory of increased budgeting of the GOI since 2014 on sanitation, but initially decreased spending in sanitation by the states, due to late release of funds; it also examines the sudden surge in expenditure in the states particularly Odisha in the area of sanitation from 2015-16 which translated into improved infrastructure and better coverage particularly in individual household toilets.

A component wise analysis shows the uneven patterns of expenditure with more investment on infrastructure, particularly household toilets which has no doubt helped in combatting open defecation, but low spending in areas like Information Education and Communication (IEC) and a complete neglect of environmental considerations by no spending in Solid And Liquid Waste management standing as obstacles in real behavioural change in the state of Odisha. The paper comes up with recommendations to review component wise spending and ensure greater convergence for better delivery.

Key Words – *Budget, Component, Expenditure, Health, Sanitation, Water*

INTRODUCTION

Is there any relationship between sanitation, health, nutrition, and our well being? It has been found that drinking contaminated water and not appropriately disposing human excreta, lack of proper hygiene and improper disposal of waste, both solid and liquid can be the major cause of many diseases.

Governments in India have consistently spent sizeable allocations in the area of drinking water and sanitation, but in spite of this around 595 million people, which are nearly half the population of India, defecate in the open (UNICEF: 2011); and Census 2011 (GOI: Census 2011) reports that that 22 % of rural households have to walk more than 500 metres to fetch drinking water.

India accounts for 90 percent of the people in South Asia and 59 percent of the 1.1 billion people in the world who practice open defecation (Banerjee et al 2013). Though sanitation missions are as old as the formation of the Indian state, and have in each 5 year plan addressed the component of sanitation, but the emphasis was first on drinking water and shifted majorly to sanitation only in 2015 with the Swaccha Bharat Mission (SBM). The figures in both areas (Drinking water and Sanitation) still leave a lot to be desired and India was one of the major defaulters in the Millennium Development Goals (MDGs).

Since 2015-16 with increased allocation for sanitation, there has been a marked decline in the drinking water allocations of the Government of India (GOI) and this could have grim impacts, considering the recent drought- situation in India, increasing the drinking water crisis and even leading to slip-backs in toilet usage. Further, the Parliamentary Standing Committee on Rural Development in the 23rd Report on the Ministry of Drinking Water and Sanitation in May, 2016 takes note of the repercussions of the decline in the Union Budget allocation for drinking water programme in rural India. Concerns have also been expressed on the quality of water which is being addressed by a sub-mission of the National Rural Drinking Water Programme, (NRDWP). (Agarwala: 2017)

The sanitation missions at both the state and national level have seen a major boost not in just their budgets, but also in the thrust of official attention. A Component wise analysis of different budget heads under sanitation, with the emphasis on the state of Odisha, shows large increases in toilet coverage at the household level in the state, and precipitous rise in total spending on sanitation, but poor coverage in public toilets including schools and Anganwadis (Day care centres).

Note must also be taken of previous failures of missions like the Total Sanitation Campaign launched in 1999 where it was reported that 81 million households constructed toilets at the end of the 11th plan period. But this data was subsequently found to be incorrect. The decade infact saw progress being turned upside down and ironically an increase in the number of rural households without latrines by 8.3 million. (Arjun: 2015) Considering these statistics, more than infrastructure, behavioural change has to be the key. And will a limited focus on household infrastructure alone change behaviour patterns when there is very limited emphasis on public toilets.

Hypotheses

1. As a result of greater emphasis and policy thrust on rural sanitation post Swacha Bharat Mission, there was increased spending in sanitation in the state level at Odisha from 2015-16, inspite of delays in fund disbursement, following patterns of previous years.
2. Increased spending on sanitation saw an emphasis on building of household level toilets, without concomitant spending on public utilities of sanitation and waste management.

Literature Survey

There has been substantial scholarship establishing the causal relationship between poor sanitation and human health. Jamie Bartram et al, argue in their paper, "Focusing on Improved Water and Sanitation for Health", "that a silent humanitarian crisis kills some 3900 children every day and thwarts progress towards the MDGs (now changed to SDGs- Goal 6) especially in Asia and Africa". They reiterate that the basis of this catastrophe is that 4 of every 10 people in the world do not have access to even a simple pit latrine and almost 2 in 10 have no access to safe drinking water. They reveal that far more people are victims of these conditions than terrorism or weapons of mass destruction, but these have not captured the public and political imagination and public resources, the way the more politically volatile issues have. (Bartram et al: 2005)

Mishra and Ghadai, in "Merit Goods, Education Public Policy– India At Cross Roads", show that there is a significant reduction in the Indian budget in different sectors including swacha bharat and state that the reason given by the Indian Finance Minister, is that with increased allocations by the 14th Finance Commissions in areas like education, health and sanitation, the states should take the initiative. (Mishra, Ghadai: 2015)

In a study on, "Health, Nutrition and Prosperity: A Microeconomic Perspective", Duncan Thomas and Elizabeth Frankenberg put forth the view that "health and economic prosperity are congruent". They opine that in both micro and macro data, ample evidence is present that a wide range of health indicators has a positive correlation with diverse dimensions of economic prosperity. "Isolating the causal pathways that link health and economics has been a core issue. Causality runs in both directions is likely". They say that higher income individuals invest more in human capital, including health: as incomes grow, more is invested on better diets, improved sanitation and good health care, leading to better productivity. (Thomas, Frankenberg: 2002)

Lack of sanitation leads to disease, was first noted scientifically in 1842 in Chadwick's seminal work. (Mara et al: 2010) "Report on an inquiry into the sanitary condition of the labouring population of Great Britain". (Chadwik: 1842) A less scientifically rigorous but nonetheless professionally significant indicator of the impact on health of poor sanitation was provided in 2007, when readers of the BMJ (British Medical Journal) voted sanitation as the most important *medical* milestone since 1840. (Ferriman: 2007)

Methodology

Based on the rationale of examining the spending patterns, to understand the relationship between money spent and targets achieved, a detailed analysis of the MoDWS data for the State of Odisha was

initiated with a look at a cross section of performance at a district level and budgets spent on different heads. The achievements of each district were tabulated against the money spent.

The study in its' nature is exploratory; carried on to develop an understanding of whether the significant decline in the budgets of the MoDWS in 2015-16 and a precipitous decline in the drinking water budget, affect the outreach of drinking water to hitherto unreached areas, and in tandem affect public health. It also explores the changing patterns of investment in water and sanitation and the need to emphasise on behavioral change to ensure sustainability, through the consideration of expenditure data. On this basis the districts were ranked on the different components under the water sanitation mission like HHs covered under toilets, Information, Education and Communication material available (IEC), Solid and Liquid Waste Management (SLWM), etc. After the districts were ranked, a second stratification on performance and geographical location was made to ensure that the sample was inclusive from a geo-political perspective.

The data for the concerned study are secondary in nature and collected from the Ministry of Drinking Water Sanitation (MDWS), Government of India, website (http://sbm.gov.in/sbm/). All the data has been analyzed using simple arithmetical techniques such as percentages and with the help of excel.

Sampling:

For the purpose of this analysis, initially stratified sampling process was adopted, based on two stratification variables:

1. **Performance** - the first criterion taken into consideration is performing, less performing and non performing districts with regard to sanitation expenditure and toilet construction. Districts chosen – Angul, Balasore for good performance and Koraput, Malkangiri for poor performance.

A comparison of Odisha data with the state of Rajasthan was done, as Rajasthan was found to have incurred the maximum expenditure in 2105-16, if seen from a component wise break up of sanitation data, as well as overall spending patterns also, followed by Odisha.

2**. Geographical location (Zone)-** Different geo- political regions was the second consideration, along with pockets of high concentration of Scheduled tribes and castes. Samples were taken from all the five geo-political zones, Southern, Western, Northern, Central and Coastal Odisha. The districts of Koraput, Malkangiri and Ganjam have been chosen as samples for South Odisha, and with the first two districts being entirely scheduled areas with more than 50% tribal population; Sundergarh for Northern Odisha also a scheduled district with high tribal population, and home to industrial infrastructure and rapid urbanization. Balangir and Bargarh for Western Odisha with high Scheduled caste populations,

Kandhamal for Central Odisha and Cuttack and Khordha from Coastal Odisha with Khordha also home to the State headquarters, Bhubaneswar.

A comparison with the expenditure data of Jharkhand, which is bordering Odisha and also has similar composition of ethnic groups, has been done to understand the patterns of investment and thrust in two similar states.

After the initial stratified sampling process, the 11 districts and two states have been chosen based on purposive sampling process. The criterion used for the purposive sample was the best and the worst performers as regards to expenditure and the geo-political representation.

Discussions, Policy Implications

Declining trend in allocations for Drinking water in the Budgets:

From FY 2013-14 to FY 2014- 15, the total allocation of MoDWS was enhanced by less than 1 percent from Rs 12,006 crore to Rs 12,107 crore. In FY 2013-14, the MoDWS budget was already just 0.11 percent of GDP at current prices. In FY 2015- 16, the budget further dropped to Rs 6,236 crore, which is a 48 percent reduction from FY 2014-15. (Kapur et al: 2015).

Though at the start of FY 2015-16, GOI allocated Rs 3,625 crore for rural sanitation but the revised allocation was enhanced that year by passing supplementary budgets in July and December. One of the reasons for this increase is due to the introduction of a 0.5 per cent Swachh Bharat cess introduced in November 2015. (Kapur, Srinivas and Raychoudhury: 2016)

With a proportionate increase in budget allocations for rural sanitation, the share of drinking water has been reduced even further in 2015-16. A provision of Rs 2611 crore was made for NRDWP (National Rural Drinking Water Program) and rural water supply inclusive of Rs 261 crore for the North-Eastern Region. 22% and 10% of the total allocation i.e., Rs 575 crore and Rs 261 crores, is earmarked for Scheduled Caste Sub-Plan and Tribal Sub-Plan respectively for the year 2015-

Table 1- Annual allocations of The Ministry of Drinking water and Sanitation

Year	MDWS – Annual allocation[1]	Swach Bharat Mission- (only sanitation)	Nirmal Bharat Mission (only sanitation)
2015 -2016	Rs. 6236 crores	Rs – 3625 crores	-
2014 -2015	Rs 12,107 crores		Rs 2,850 crores
2013-2014	Rs 12,006 crore		Rs 2,300 crores
2012-2013	Rs 13,005 crore		Rs 2,500 crores
2011 -2012	Rs10,005 crores		Rs 1500 crores

(Gopalakrishnan: *2015 & GOI: 2015)*

16. (GOI, MDWS: Notes on Demand-2015) This is a drop from 2014-15 by 72 %, the budget for Drinking water in 2014-15 being Rs 9192 crores.

Just 26.9 million of 167.8 million households (16%) in rural India have piped water, as per the statistics of the MoDWS given to the Rajya Sabha on February 6, 2017 as per newspaper reports.

Changing allocation patterns and priorities:

Total Sanitation Campaign (TSC) approach was adopted in 1999 and it spoke about behavioural change as the "prime driver" for sanitation. In 2012, the programme was again revamped as Nirmal Bharat Abhiyan (NBA). In 2014, it was redesigned once again and renamed as the Swachh Bharat Mission (SBM). In FY 2015-16, the budget for rural sanitation stood at 58% of the total MoDWS allocations, hiked from 24 percent in FY 2014-15, a hike of 34% points.

From Rs. 1,500 crore in FY 2011-12, the provision for rural sanitation has been steadily increasing, each year, with the exception of 2013-14, which saw a 8% decline. Rs 3,625 crore had been earmarked for the SBM from the overall Rs. 6,244 crores, which is 58% of the allotted fund to the MDWS in the financial year (2015-16) which is an increase of **27%** over the previous financial year.

But though allocation increased, spending decreased. Sizeable funds were allocated to states for sanitation, but a large amount was unspent. The principal reasons quoted were "delay in central release of funds". **(**Gopalakrishnan: *2015).* In FY[1] 2013-14, 30% of funds were released only at the end of the financial year, that is in the last month (February- March); resulting in under spending and the states spending a mere 45% of funds allotted. Similar trends had been observed in the previous financial year (2012-13) which saw 36% funds being released as late as March 2013.

In FY 2014-15, till February 2015, as little as 33% of the approved fund was disbursed by GOI and consolidated at the block, district and state level. Upto February 2016, only 49 per cent of the total allocation had been sanctioned by Government of India for the financial year. Release of SBM funds to states has been quite slow. (GOI).

Annual Implementation Plans see their final sanction by the National Scheme Sanctioning Committee of the MDWS. The funds get released based on approvals.

The GOI[2] releases for rural sanitation saw a decline. In FY 2010–11, GOI released 97 percent of its allocations. This further decreased to 94 percent in 2013–14.

Spending patterns in Odisha and a comparison with other states: Let us look at the funds available in Odisha under Swach Bharat Mission (in lakhs) and the total Expenditure in 2015-2016.

The expenditure patterns of Odisha were very low. While 2013 – 14 saw, Odisha carrying forward a balance of Rs 5608. 75 lakhs and even with a minuscule allocation of Rs 30.99 lakhs, the state was

able to spend only 10.57% of the budget, leading to a carry forward of Rs 5112. 67 (lakhs); but even this was one of the highest amongst states of its size at the national level. While 2014-15 definitely saw improvement, but still only less than 50% of the budget allocated (Rs 3641.38 lakhs) was spent. This is poor performance considering funds were available, as balances show. The balances in the year, 2013-14 was Rs 5112.67 lakhs and in the year 2014-15 was at a slightly reduced Rs 3687.99 lakhs.

Angul district of Odisha had the highest available fund of Rs 859.13 lakhs (state share) and Rs 2585.228 lakhs (Central share) in 2014-15 but made a expenditure of a mere 36% of the state and central allocation and Ganjam district with 18% expenditure in the state share and 29% of the central share showed one of the lowest spending.

There were a few exceptional performers inspite of the general tide of low spending. The districts of Bhadrak (95%), Sambalpur and Jagatsingpur with 100% expenditure of funds under the central share and the districts of Balangir, Bhadrak, Jagatsingpur and Sambalpur with 100% expenditure under State share, were exceptions to the general rule of low spending.

But in 2015 -16 Odisha showed unprecedented realization with the state spending as much as Rs 39913.76 lakhs (101.98%) of the state share and Rs 119706.30 lakhs (173%) of the central share. 15 of the 30 districts of the state showed 100% expenditure under state share, though the State capital, Bhubaneswar showed poor spending of Rs 33.93 lakhs and only in the component IEC material . All the districts (with the exception of the state headquarters, Bhubaneswar) spend 100% of their funds under the Central share, with Bhubaneswar spending Rs 53.35 lakhs and only under IEC.

The following districts of Odisha showed some of the highest expenditures in the country. Angul district is also being show cased by the SBM, GOI as a model district for sanitation in the country. This has been a remarkable turn around story.

1. Mayurbhanj - Rs 2565.06 lakhs (SS) + Rs 7694.36 lakhs (CS); = Rs 10259.42 lakhs
2. Baleswar - Rs 2495.90 lakhs (SS)+ Rs 7483.37 lakhs (CS); = R s 9979.27 lakhs
3. Sundergarh - Rs 2219.26 lakhs (SS) + Rs 6653.68 lakhs (CS); = Rs 8872.94 lakhs
4. Bargarh - Rs 1951.02 lakhs (SS) + Rs 5865.15 lakhs (CS); = R s 7816.17 lakhs
5. Ganjam - Rs 7567.57 lakhs (CS); = Rs 7567.57 lakhs

[2] Financial Year

[3] Government of India

6. Angul - Rs 1625.07 lakhs (SS[3]) + Rs 4877.37 lakhs (CS[4]); = Rs 6502.44 lakhs
7. Dhenkanal - Rs 1612. 71 lakhs (SS) + Rs 4838.56 lakhs (CS); = Rs 6451.27 lakhs
8. Keonjhar -Rs 4917.44 lakhs (CS) and = Rs 4917.44 lakhs
9. Balangir - Rs 4441.33 lakhs (CS); = Rs 4441.33 lakhs
10. Navarangpur - Rs 4395.46 lakhs CS) = Rs 4395.46 lakhs
11. Jagatsingpur - Rs 4189.45 lakhs (CS); = Rs 4189.45 lakhs
12. Cuttack - Rs 4066.48 lakhs (CS); = Rs 4066. 48 lakhs
13. Jajpur - Rs 4036.27 lakhs (CS); = Rs 4036. 27 lakhs

During this period (2015-16) the India expenditure stood at Rs 1246850.64 (lakhs) (with Rajasthan spending the most in absolute numbers at Rs 171302.8 (lakhs) and Odisha following in second position with an expenditure of Rs 159620.1 lakhs; and with Goa showing a whopping 1080.93% of expenditure under the state share though the actual expenditure stood at a mere Rs 160.95 lakhs and Rs 482.85 lakhs (324%) under the central share.

In comparison in 2013-14 the India expenditure stood at a mere 39.35% of the allocation, with the total expenditure of all the states (centre + state share) at Rs. 268820 (lakhs). In a mere two years there was a rise of 363% in the national level spending on sanitation. Bihar, Madhya Pradesh, Tamilnadu and Uttar Pradesh were some of the major spenders in 2013-14, though none of them crossed 60% of their total budget with Tamilnadu at the top with 58.61%.

Consistently Jharkhand, Odisha's neighbouring state with a sizeable tribal population like Odisha, spent at rates below the Odisha spending, with the exception of 2013-14, when Odisha expenditure stood at 10.57% as against Jharkhand at 18.96%. But in 2015-16, Odisha had gone much ahead with 101.98% spending (Rs 39913.76 lakhs) under the state share and (Rs 119706.30 lakhs (173%) of the central share as against 32.43% (Rs 8829.44) of Jharkhand under the state share and Rs 26276. 79 (157%) of the central share. (GOI, MDWS: SBM Gramin, 2013-14, 2014-15, 2015-16)

What led to such an impetus in spending in the area of rural sanitation, for a state which had been classified as a laggard in the particular theme. Among the many reasons that can be ascribed to the increased spending, some of the foremost may be ascribed to a greater national consensus around "no open defecation" having been developed with the launch of the SBM, which saw greater bureacratic involvement and the second is bigger

[4] State share

[5] Central share

allocations to sanitation as against drinking water also changed the thrust of the campaign from 2014-15. But it is noteworthy to see whether this percolated to all the components of sanitation or has been limited to a few areas.

Component wise spending in 2015-16 -Central and State Share.

Under the component wise expenditure the paper has examined some of the main program components of sanitation under the SBM (Gramin). They are

1. Integrated Household Latrine (IHHL)
2. Solid and Liquid Waste Management
3. Sanitary Complex
4. School Toilet
5. Anganwadi Toilets
6. IEC

I. IHHL

The situation of household toilets in the block level survey conducted by the Ministry of Drinking Water and Sanitation in 2012 shows districts like Angul with less than 5% households with toilets. Districts like Balasore (34%) Ganjam (20%) and Khordha (22%) HHs with access to toilets were some of the best performers, inspite of very low coverage, with tribal districts like Malkangiri and Koraput showing toilet coverage as low as 2.4% and 2.7% respectively, of the HHs with access to toilets. The total increase in Integrated Household Latrine (IHHL) from 2012 to 2016 is of 14% points in Odisha, with the maximum coverage reported in 2015-16.

Table 2- Changes in 2013-14 to 2015 -16 in IHHL

Sl	Districts	No. of HH covered in 2013-14	No. of Households covered 2014-15 (including unapproved	% change	No.of HH reported in [2015-16]	Total Balance uncovered HHs	% of HHS left
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Angul	397	10601	328.58%	54125	221000	71%
2.	Balangir	3956	2690	-38.58%	49191	308185	81%
3.	Bargarh	2599	3872	39.86%	65048	264847	68%
4.	Ganjam	1481	3301	80.15%	85044	497561	71%
5.	Koraput	415	4694	242.58%	37445	232807	83%
6.	Malkangiri	21	2254	467.59%	23670	105634	79%
7.	Kandhamal	46	5661	481.27%	36532	120321	71%
8.	Khordha	469	3907	211.99%	40757	177765	67%
9.	Cuttack	575	3917	191.87%	44726	362306	75%
10.	Balasore	10055	12070	18.27%	81970	224737	44%
11.	Sundergarh	875	3783	146.4%	73756	206431	65%

(GOI-MDWS: Target vrs Achievement- 2017)

While certain districts like Balasore and Angul have taken very sizeable and successful leaps forward to challenge open defecation, but seven of the eleven sample districts still continue to show more than 70% HHs without toilets. Below Poverty Line (BPL) families must be incentivized to make toilets. Availability of water stands as a major impediment in IHHL use, and availability of water must be linked with

construction of toilets, or fall backs can be anticipated as in previous missions.

Some Highlights of IHHL

1. The highest expenditure on IHHL in Odisha has been made by Mayurbhanj district with an expenditure of Rs 2562.11 lakhs under the state share and Rs 7685.84 lakhs under the central share, followed by Ganjam with an expenditure of Rs 2526.05 lakhs under the state share and Rs 7560. 16 lakhs under the central share and Balasore stood third with Rs 2459.07 lakhs under the state share and Rs 7376.85 lakhs under the central share.
2. The lowest expenditure under IHHL in Odisha has been made by the district of Boudh (Rs 904.41 lakhs) under the central share and (Rs 300.87 lakhs) under the state share. Though low expenditure may not signify low coverage, as Boudh is the smallest district of Odisha with just 3 CD[1] blocks. Kalahandi and Malkangiri districts also continue to be low spenders under IHHL.
3. Balasore now shows the second lowest (44%) HHs left without toilets, just below Deogarh district with 41%. Malkangiri and Koraput with low expenditure under this head also still have 79% and 83% HHs respectively to be covered.

II. Solid and Liquid Waste Management:

To create clean environs, it is essential to focus on IEC interventions emphasising on Solid and Liquid Waste Management (SLWM) for creating a felt need for such waste management amongst the people. This should lead towards setting up of methods for scientific disposal of waste material in manners that have visible impacts on populations. The local self government has to be encouraged to demand for a system to manage waste in their environment, and also take the responsibility to operate and maintain.

All the 30 districts of Odisha have not spent a single rupee under this head, Solid and Liquid Waste Management under the state or central share; and even Khordha district, whose headquarters is Bhubaneswar the state capital, seems to have drawn a blank under this for the last two financial years 2014-15 and 2015-16.

In 2014-15, Gujarat had the maximum expenditure both from the central and the state share under SLWM with an expenditure of Rs 1324.68 lakhs (central + state share). 9 states including Odisha made no expenditure under this head. In 2015-16, Gujarat was replaced by Haryana who topped the expenditure under this head from both the Central and State share with an expenditure of Rs 1309.19 lakhs. 12 states including Odisha drew a blank under this head. (GOI-MoDWS- District Wise State and Central Share: 2015-16)

Such management is urgent and must be made while adhering to the rules of

1. Municipal Solid Waste Management and Handling 2000

2. Environmental Protection Act 1986
3. Biomedical Waste Management and Handling Rules 1998
4. Hazardous Waste Management and Handling Rules 1989, 2003, 2008

III. Sanitary Complex

With the exception of Cuttack district no other district has made a sanitary complex in 2015-16. Cuttack district has made an expenditure of Rs 8.4 lakhs from the central share and Rs 4.2 lakhs from the state share, which is the only expenditure under this head in this financial year. None of the other major urban hubs in the state have invested on sanitary complexes in the year, inspite of the emphasis on creating urban infrastructure around sanitation by the SBM. In 2014-15, from the state share, Rs 4.67 lakhs and central share Rs 9.35 lakhs was spent by Cuttack; and the only other districts who spent under Sanitary Complex are Balasore and Dhenkanal. There is a decline of 45% in expenditure between 2014-15 and 2015-16, under this head.

IV. School Toilet

Very low emphasis has been paid to school toilets, even though 21% of schools remain without toilets in the state. Only Balasore and Kendrapada, of the 30 districts have spent Rs 74,000 and Rs 3.92 lakhs respectively (central share) and Sundergarh and Khordha have spent Rs 32,000 and Rs 1. 68 lakhs respectively (state share) on school toilets in 2015-16.

As against this in 2014-15, the state had spent Rs 188.35 lakhs under Central Share and Rs 82.08 lakhs under state share. There is a 75% drop in expenditure under this head between 2014-15 and 2015-16.

V. Anganwadi Toilet

Not a single district of Odisha has incurred any expenditure on Anganwadi toilets (day care centres for children), either from the Central or State share in 2015-16. This is inspite of the fact that only 48.49% of Anganwadis in the state have toilets. In 2014-15 the state had also spent a mere Rs 1.60 lakhs (both central and state share inclusive) under this head.

VI. IEC

Two districts of Odisha, Gajapati and Nayagarh have not spent a single rupee either from the state or Central share under IEC. State headquarters, Bhubaneswar has spent only on one head, IEC. The total expenditure in IEC has been Rs 562.62 lakhs in the year 2015-16. The expenditure in the year 2014-15 was Rs 564.98 lakhs. There is a decline of 0.4% from the previous year.

Interstate Comparison

If we look at component wise spending in the year 2015-16, under the head of

[6] Community Development

[7] Integrated Child Development Scheme

IHHL, Odisha spending at Rs 39,680.98 lakhs (SS) and Rs 119030.59 lakhs (CS), stood next to only Rajasthan at Rs 41730.95 lakhs (SS) and Rs 126577.75 lakhs (CS) .

The lowest spending was recorded by Sikkim among states at Rs 44.72 lakhs, (37.78%) under the state share (The three UTs of A&N Islands, D&N Haveli and Puducherry) did not spend at all, and the lowest spending under the Central share was again by Sikkim with an expenditure of Rs 400. 12 lakhs. The 3 Union Territories of A&N islands, Puducherry and D&N Haveli, did not spend even under the Central share. But Sikkim's low spending does not reflect poor sanitation coverage for Sikkim.

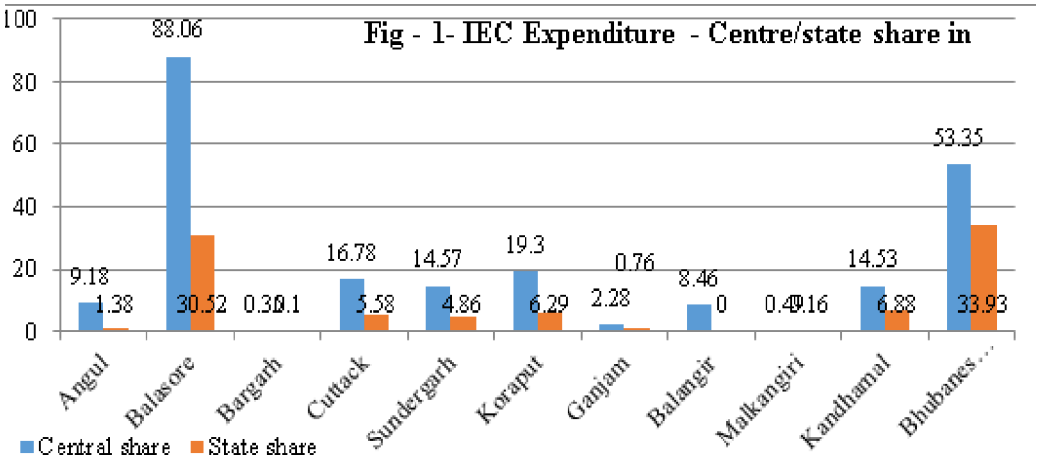
Spending under the head of Community Incentive to GP was seen only in the state of Chattisgarh and Gujarat which spent Rs 166.31 lakhs and Rs 499 lakhs respectively.

Under the head of sanitary complexes, the highest spender was West Bengal spending Rs 282.03 lakhs in the state share and Odisha stood at a poor 22nd position with a spending of Rs 4.2 lakhs in the state share; as far as Central shares was concerned, Puducherry spending Rs 560.5 lakhs was at the top and Odisha was at a lowly 23rd position with a spending of only Rs 5.93 lakhs.

Himachal Pradesh topped spending under School toilets with an expenditure of Rs 803.62 lakhs under the central share and Rs 74.39 lakhs under the state share and with Odisha showing a mere spending of 2 lakhs from the state share and marginally more at Rs 4.66 lakhs from the central share. (Contradictory data about central spending in school toilets in Odisha is seen in the MDWS website). But Odisha has mobilized sizeable funds from Public Sector Undertakings and even some private companies under their mandatory CSR expenditure for the Swach Vidyalaya Campaign in 2015-16.

In Anganwadi toilets, Jharkhand with an expenditure of Rs 74.25 lakhs and Jammu and Kashmir with a spending of Rs 36.57 lakhs top the central share expenditure charts on this head. Rajasthan with a state share expenditure of Rs 31.9 lakh has the highest spending from the state share. Odisha spent nothing from either the state or central share on anganwadi toilets, though only 48.49% of anganwadis in the state have toilets. The visualization of the ICDS[2] programme of the anganwadi as an ECD (Early Childhood Development) centre and to be the first health post for children cannot be fructified without basic sanitation and toilets in the centres. Urgent utilization of funds under this head is required to make the anganwadi centres's functional in the true sense, and not to merely work as food distribution points.

The maximum spending from the state share on IEC was done by West Bengal with a spending of Rs 508.53 lakhs and Odisha at the 10th position with a spending of Rs 151.35 lakhs. As far as central share was concerned, West Bengal tops here too with a spending of Rs 1500.83 lakhs and Odisha in comparison at the 12th position with a spending of Rs 411.26 lakhs.



One of the prime drivers for change always has been behavior change, more so in practices which have a cultural connotation. Ablution practices socio – culturally have been based around public bodies like ponds, streams, as it is often connected to the ritual life cycle of a family and an individual and has important socio-cultural implications. These behavioral practices only change gradually. Thus repeated links between morbidity and open defecation through constant use of IEC in local languages can play an important role in changing the behavior patterns. **But Odisha continues to show poor expenditure patterns on IEC, with only two districts in the sample, Balasore and Bhubaneswar (Khordha) crossing an expenditure of Rs 50 lakhs**. Odisha must take a leaf out of the example set by its neighbouring state, West Bengal here which shows an expenditure of more than 2000 lakhs under this head in 2015-16.

Training and Extension on Health, Hygiene and Behavioural Change- Major investments on innovative extension services are required, with a special cell devoted to dissemination of IEC. The extension services must be monitored and coordinated with the panchayat to make it more effective. Districts like Koraput, Malkangiri, Balangir which still have low coverage in IHHL and also in the other components of SBM continue to also show poor expenditure on IEC. They must be encouraged to use IEC more extensively at effective points.

It is the role of village level extension workers, as well as the PRI functionaries to most effectively transmit information on practices related to use of basic social and physical infrastructure. Lack of training on the causal relationship between morbidity and bad sanitation, stands as an impediment in working as an effective change agent in areas like sanitation. Training of all PRIs and extension workers

is an investment required to make the campaign more effective.

Conclusion

The Swaccha Bharat Mission has clearly not been just about increased budgets for sanitation, but States like Odisha which have long been laggards in the area of sanitation have also seen clear increase in not just spending and expenditure, but in the coming up of real time infrastructure both at the household level and the public institution level. But important areas like School toilets, Anganwadi toilets which have an important role in not just checking high IMR[1] and CMR[2], but also increasing enrolment and retention of girls in the schools- continue to be neglected.

And is the shift away from Drinking water to sanitation, an appropriate mechanism; will shifting the emphasis away from drinking water not be just addressing the problem in halves as clean drinking water plays an equally important role, as better sanitation for good health. Is it not essential and appropriate to increase investments in both the areas, as a healthy workforce can better contribute to economic growth and human development?

The importance of IEC in contributing to the ultimate success of a sanitation program is clearly not seen in states like Odisha, whose focus in spite of several failed sanitation missions continue to be only on physical infrastructure and not on behavioral change. Behavioral change may ultimately be the key in the important area of water and sanitation and its neglect could be the missing link.

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REFERENCES

Agarwala T. Union Budget 2017: Swachh Bharat Abhiyan gets good funds but what about water? http://www.cbgaindia.org/opinion/union-budget-2017-swachh-bharat-abhiyan-gets-good-funds-water/ (accessed 4 April 2-17).

Arjun K, Discrepancies in Sanitation Statistics of Rural India: EPW, January 10, 2015: Vol 2.

Banerjee. A. B, Pasha M. A.M., Fatima A., Isaac E.: A study of open air defecation practice in rural nandivargam village, International Journal of Bioassays, June 2013, Vol 2, No 07; 1-2. Available from http://ijbio.com/index.php/ijb/article/view/237.

Bartram, J.B. Lewis, K, Lenton, R, Wright, A Focusing on improved water and sanitation for health. The Lancet, 2005 ;(Feb 26-Mar 4, 2005) :(Volume 365): 810.

Ferriman, A. BMJ readers choose the "sanitary revolution" as greatest medical advance since 1840. *BMJ:* (2007) *British Medical Journal, 334*(7585), 111. doi:http://dx.doi.org/10.1136/bmj.39097.611806.DB

GOI- Census 2011- Odisha -HH-6: house holds by main source of drinking

water and location. 2011, http://www.censusindia.gov.in/

GOI- MDWS. *Notes on Demands for Grants. http://indiabudget.nic.in/ub2015-16/eb/sbe30.pdf (accessed 3 April 2017).*

GOI- MDWS. Format B2(a)] Yearly Financial Status of approved expenditure for the Financial year 2014-2015 and 2013-14. . http://sbm.gov.in/tsc/Report/Release/Rpt State wise Release Allocation.aspx? id=Home (accessed 3 April, 2017).

GOI-MDWS. Swaccha Bharat Mission Gramin: Complete Data Status: - 2015-2016. [Format E15]. http://sbm.gov.in/tsc/Report_NBA/StatusNote/Rpt_Summary StateAndDistrict.aspx?id=Home): (accessed 3 April, 2017).

GOI-MDWS. Swaccha Bharat Mission Gramin: District wise Center Share Expenditure for Finance year 2015-2016. . http://sbm.gov.in/tsc/Report/Financial/Rpt State District Exp Year wise.aspx?id =Home: [Format B2(b)] (accessed 3 April, 2017).

GOI-MDWS- SBM Gramin. [Format B2(b)] District wise State Share Expenditure for Finance year 2015-2016 and [Format B2(b)]. . http://sbm.gov.in/tsc/Report/Financial/Rpt State District ExpYearwise.aspx?id=Home: [Format B2(b)] (accessed 3 April 2017).

GOI-MDWS SBM Gramin. [Format A3] Swachh Bharat Mission Target Vs Achievement of BLS-2012 (Entry Status). http://sbm.gov.in/tsc/Report_NBA/Physical/Rpt_Target VsAch_Selection Based.aspx?id=Home; (accessed 3 April, 2017).

GOI-MDWS, SBM Gramin. Format B 2(b) District wise State Share Expenditure(Approved) for Finance year 2015-2016.. http://sbm.gov.in/tsc/Report/Financial/Rpt State District Exp Yearwise.aspx?id=Home; (accessed 4 April 2017).

GOI-MDWS, Outcome Budget, 2015-16. Retrieved from http://www.mdws.gov.in/sites/default/files/outlay.pdf on 31/10/2017

Gopalakrishnan S. *BUDGET 2015: Sanitation and the Swachha Bharat Mission. http://sanitation.indiawaterportal.org/english/node/3234 (accessed 15 November 2016).*

Kapur A, Iyer S, Accountability Initiative Research and Innovation for Governance Accountability. *Budget Briefs* 2015-16; 7(5): http://accountabilityindia.in/sites/default/files/sbm_2015.pdf (accessed 26/11/2016).

Mara D, Lane J, Scott B, Trouba D, Sanitation and Health. PLoS Med, (2010) 7(11): e1000363. doi:10.1371/journal.pmed.1000363

Mishra S.N, Ghadai S.K, Merit Goods, Education Public Policy– India At Cross Roads, Journal of Education and Practice, Vol.6, No.12, 2015. Available at http://files.eric.ed.gov/fulltext/EJ1080710.pdf

Thomas. D, Frankenberg. E, Health, nutrition and prosperity: a microeconomic perspective. Bull World Health Organ, Jan. 2002; Vol.80 n.2 Genebra : 1

UNICEF India: newsletter: Eliminate Open Defecation, Available at http://unicef.in/Whatwedo/11/Eliminate-Open-Defecation.

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