

## **IMPLEMENTATION OF SWACHH BHARAT MISSION (GRAMIN) : AN EMPIRICAL STUDY OF PERFORMANCE OF OFFICIALS OF WATER SUPPLY AND SANITATION DEPARTMENT OF PUNJAB**

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The Swachh Bharat Mission (SBM), also known as the Clean India Mission, is a nationwide campaign that aims to make India clean and free of open defecation. The mission was launched by the Prime Minister of India on October 2, 2014, to coincide with the 150th birth anniversary of Mahatma Gandhi.

The Water Supply and Sanitation Department plays a crucial role in the Swachh Bharat Mission (SBM) by primarily focusing on constructing and maintaining toilets, managing solid and liquid waste, ensuring access to clean drinking water, and promoting hygiene practices, ultimately contributing to the goal of eliminating open defecation and achieving a cleaner India across rural and urban areas. The officials play a crucial role in the implementation of Swachh Bharat Mission. The key responsibilities of officials are:

### **Toilet construction:**

Leading the construction of individual household toilets in rural areas, ensuring proper design and functionality to achieve Open Defecation Free (ODF) status.

### **Community sanitation facilities:**

Developing and managing public toilets in rural areas and key public spaces.

### **Waste management:**

Implementing systems for solid and liquid waste collection, treatment, and disposal, including awareness campaigns on waste segregation.

### **Water supply infrastructure:**

Improving access to clean drinking water through the development and maintenance of water supply networks, particularly in rural areas.

### **Behavior change communication:**

Promoting hygiene practices through awareness campaigns on handwashing, proper toilet usage, and waste management.

### **Monitoring and evaluation:**

Tracking progress towards SBM goals by conducting surveys and assessments of sanitation facilities and hygiene practices.

**Capacity building:**

Training local communities and sanitation workers on proper operation and maintenance of sanitation facilities.

**Important points to consider:**

Collaboration with other departments: The Water Supply and Sanitation Department often collaborates with other government departments like health, education, and rural development to achieve comprehensive sanitation improvements.

**Sustainability focus:**

The department aims to ensure long- term sustainability of sanitation initiatives by promoting community ownership and participation in managing sanitation facilities. The objectives of the present study are as follows:

**Objectives of the study**

1. To examine the functioning of officials regarding SBM activities.
2. To analyse the performance of officials regarding SBM projects in rural areas of Punjab.
3. To get the opinion of officials towards people cooperation and panchayats performance.

**Research Methodology**

The primary data was collected from the officials of three area-wise biggest districts Ludhiana, Amritsar and Hoshiarpur under study from the three different regions (Malwa, Majha and Doaba) of Punjab. The data was collected through an interview schedule method. The officials were on different designations like X EN, SDO, JE, SE, BSO, motivators, Block coordinators and other which were related to SBM. They were doing job on different places such as, division, district and block level. Total officials were 120. Moreover, observation method was also used during the survey.

First of all, a brief profile of the officials in the sample is being given.

**Findings of the study****Table 1.1: Designation of officials in the sample**

Options	Number of officials	Percentage
SDO	7	5.83%
X EN	3	2.5%
JE	15	12.5%
Any other	95	79.16%
<b>Total</b>	<b>120</b>	<b>100%</b>

Table 1.1 shows that a high majority (79.16%) of the officials of Swachh Bharat Mission were working on a designation of BRC's, motivators and other related posts. Furthermore, SDO, X EN and JE were less in number in the department of water supply and sanitation in the concerned districts of Ludhiana, Hoshiarpur and Amritsar and therefore, they received a lesser representation in the selected sample as well.

**Table 1.2: Age variable**

Options	Number of officials	Percentage
21-30 years	19	15.83%
31-40 years	60	50%
41-50 years	32	26.66%
51 and above years	9	7.5%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.2 indicates that 50% of officials were in the age group of 31-40 years. Furthermore, the next segment of officials with 26.66% were in the age group of 41-50 years old. Only 7.5% officials were older with an age above 51 years.

Thus, it is very clear that half of the officials were younger. As a result, it can be expected that they can work harder because of energy and age favouring them as compared to their older counterparts.

**Table 1.3: Place of work**

Options	Number of officials	Percentage
Division	18	15%
District	31	25.83%
Block	71	59.16%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.3 shows that majority (59.16%) of the officials were working on the block level. Besides this, only 25.83% of the officials were related to the district level workplace and a less number of (15%) officials were working on the division level.

**Table 1.4: Education profile of officials**

Options	Number of officials	Percentage
Matric/+2	1	0.83%
Graduation	70	58.33%
Post-graduation	48	40%
Any other	1	0.83%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.4 is based upon the three districts of Punjab: Ludhiana, Hoshiarpur and Amritsar. It highlights that the majority (58.33%) of officials of these districts of Punjab had a graduation level of degree. Only 40% of the officials of water supply and sanitation department of these districts of Punjab had a degree of post-graduation. Hence, it is quite clear from the above table that majority of officials were qualified. However, they were not too educated and were only fulfilling the demand of their job. Only some of the officials had a master's degree and had a sound knowledge of the government policies.

**Table 1.5: For how long are you associated with SBM (Gramin)?**

Options	Number of officials	Percentage
1 year	8	6.66%
2 year	24	20%
3 year	23	19.16%
More than 3 years	65	54.16%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.5 shows that nearly half (54.16%) of officials had a sound experience of SBM (Gramin) because they were associated with this program for more than 3 years. On the other side, a few (6.66%) number of officials had less experience of this program. This was due to the fact that they were onboarded onto this program about 1 year ago.

Thus, it is very clear from the above table that most of officials had the ability to implement this program in a successful way because they were working with this program from many years.

**Table 1.6: Do you think that the common man is aware about the sanitation and public health?**

Options	Number of officials	Percentage
Yes	75	62.5%
To a Large extent	25	20.83%
To some extent	20	16.66%
No	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.6 indicates that a majority (62.5%) of the officials thought that the common man was aware about the sanitation and public health. Furthermore, some officials (20.83%) felt that the people were aware to a large extent about the good sanitation system and its linkage with public health.

Hence, it is concluded that majority of the officials had a positive view point about the people because they believed that people had sufficient knowledge about the sanitation and health issues.

**Table 1.7: According to you, do people think that to use the toilet is important from the perspective of health and cleanliness?**

Options	Number of officials	Percentage
Extremely important	115	95.83%
Slightly important	0	0%
Not important	4	3.33%
Can't say	1	0.83%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.7 highlights that a high majority (95.83%) of officials felt that people use the toilet on regular basis because people thought that it was necessary for the good health and cleanliness. On the other side some (3.33%) officials said that some people residing in the rural areas did not use the toilet because they are not habitual to it.

So, it is very clear from the above table that a high number of officials had a positive viewpoint about the people using the toilet for health and cleanliness.

**Table 1.8: What type of practices are people following for the hygienist life?**

Options	Number of officials	Percentage
Drink clean water	-	100%
Use the toilet for defecation	-	100%
Keep the surrounding clean	-	100%
No spitting around	-	100%
All of the above	120	100%
None of the above	-	100%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.8 shows that all (100%) of the officials of three districts of Punjab expressed the views that the people of their area were living in a hygienic environment because they were doing some practices for it, such as drinking clean water, using the toilet for defecation, keeping the surroundings clean and no spitting around.

As a result, it can be said that people were following the parameters of healthy lifestyle after the implementation of Swachh Bharat Mission.

**Table 1.9: Do you give the information to people and village panchayats about the ill effect of open defecation?**

Options	Number of officials	Percentage
Yes	90	75%
Often	6	5%
Some times	18	15%
No	6	5%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.9 indicates that a high majority (75%) of officials stated that they gave sufficient information to the people and village panchayats about the ill effects of open defecation. On the other side, a smaller number of officials (15%) said that they gave information occasionally to the people about the demerits of open defecation.

It is very clear from the above table that officials were performing their duties in a proper manner because they were making people aware about the different components of SBM.

**Table 1.10: What do you use to make people aware about the cleanliness?**

Options	Number of officials	Percentage
Conferences and seminar	99	82.5%
Workshops	10	0%
Meetings	21	17.5%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.10 shows that a high majority (82.5%) of officials of water supply and sanitation department of Ludhiana, Hoshiarpur and Amritsar districts claimed that they used various ways to make people aware about the cleanliness. However, they mainly focused on organizing conferences and seminars in the villages for awareness purposes.

Thus, it is very clear from the information of above table that officials organized conferences and seminars in rural areas to spread the awareness among the people about the cleanliness.

**Table 1.11: What is the role and responsibility of motivators during the implementation phase in the following?**

Options	Number of officials	Percentage
Facilitating toilet construction	-	100%
Retrofitting and improvisation of assist	-	100%
Facilitating sustained behaviour change	-	100%
Promoting Public health and hygiene	-	100%
SLWM activities	-	100%
All of the above	120	100%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.11 indicates that all (100%) of the officials claimed that motivators played the crucial role for better implementation of Swachh Bharat Mission (Gramin) in Punjab. Furthermore, they stated that without motivators the desired outcomes could not be achieved because motivators compelled the people to construct the toilet in their homes. They helped change the mindset of people about the toilet along with outlining the importance of public health and hygiene.

Thus, it is very clear that the role of motivators was very effective in the implementation process of SBM.

**Table 1.12: Are you satisfied from the construction of toilets in your area?**

Options	Number of officials	Percentage
Yes satisfied	105	87.5%
Satisfied To a Large extent	10	0%
Satisfied to some extent	10	8.33%
Not satisfied	5	4.16%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.12 highlights that a high majority (87.5%) of officials were satisfied from the construction of toilets in their area and only 4.16% of officials were dissatisfied.

As a result, it can be inferred that the high level of satisfaction of officials showed that they achieved the desired targets of SBM phase-I in their areas. Officials claimed that individual households constructed the toilet in their homes and they were satisfied from the cooperation of people.

**Table 1.13: According to your observation are all the toilets functioning properly?**

Options	Number of officials	Percentage
Yes	110	91.66%
To a Large extent	5	4.16%
To some extent	5	4.16%
No	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>



The table 1.13 indicates that a high majority (91.66%) of officials said that all of the toilets were functioning properly in their areas. On the other hand, some officials (4.16%) claimed that toilets were not working properly in some houses.

Overall, it can be concluded that constructed toilets were functioning properly and desired results of SBM Phase-I had been achieved by the sanitation department.

Table 1.14: Are people using their toilets regularly?

Options	Number of officials	Percentage
Yes	96	80%
To a Large extent	15	12.5%
To some extent	9	7.5%
No	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.14 shows that a high majority (80%) of officials stated that people were using their toilets regularly. Another good point was noted that nobody gave a negative review about it.

Hence, this was a positive sign for the implementation of Swachh Bharat Mission. Officials mentioned that their department took landmark steps in order to reduce open defecation through the aid of this program. As a result, it can be established that the officials guided people about the proper usage of toilets.

**Table 1.15: How much incentive did you give to the beneficiaries for the construction of toilets?**

Options	Number of officials	Percentage
10,000	0	0%
12,000	0	0%
15,000	120	100%
Any other amount	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.15 indicates that all (100%) of the officials of the three districts of Punjab stated that all of the beneficiaries of SBM received Rs.15,000 from the government through the sanitation department as an incentive for the construction of toilets in their homes.

Therefore, it is very clear that sanitation department provided the financial help of Rs.15,000 to the poor people in rural Punjab for the construction of individual household toilets.

**Table 1.16: Is this amount sufficient for the construction of toilets?**

Options	Number of officials	Percentage
Yes	92	76.66%
To a Large extent	10	8.33%
To some extent	18	15%
No	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.16 shows that a high majority (76.66%) of officials of sanitation department stated that the amount of Rs.15,000 was sufficient for the construction of toilet. On the other hand, some officials (15%) felt that this amount was sufficient to some extent.

Thus, it is evident from the above table that sanitation officials were satisfied with the incentive and they believed that it was a sufficient amount for the construction of a good toilet.

**Table 1.17: What is the criteria to select the beneficiaries for the construction of toilets?**

Options	Number of officials	Percentage
Below poverty line	0	0%
Recommended by Panchayat	0	0%
Both above options	120	100%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.17 highlights that the entire sample mentioned that below poverty line and a resolution recommended by panchayat were the main components for the selection of a beneficiary. Therefore, it can be concluded that poor and needy people were able to benefit from this scheme. Since the beneficiary selection criteria was in the hands of panchayat, they effectively earmarked the needy people in the village for incentive. Moreover, officials stated that the department cooperated well with the panchayats regarding the selection of beneficiaries of SBM.

Table 1.18: Do your department employees go to field visits for the ODF verification?

Options	Number of officials	Percentage
Yes	89	74.16%
Often	0	0%
Rarely	29	24.16%
No	2	1.66%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.18 shows that high majority (74.16%) of officials claimed that their employees went for field visits for the ODF verification. They did the ground work for the reduction of open defecation. Disappointingly it was also noted that 24.16% of officials gave a negative review about the ODF verification. They mentioned that department employees rarely went in the field visits. Furthermore, they stated that the paper work in the office was completed as a formality regarding the ODF verification.

As a result, it is very clear that the majority officials did the field visits for checking the sustainability of ODF villages.

Table 1.19: What is the criteria do you follow for the ODF verification?

Options	Number of officials	Percentage
Based on Panchayat Resolution	0	0%
Third Party verification	0	0%
Departmental verification	0	0%
All of the above	120	100%
None of the above	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.19 shows that all (100%) of the officials reported that they followed the multistage ODF verification formula, such as panchayat resolution, third party verification (NGO) and sanitation department team. Only after these steps was the ODF status allotted to the village by the Sanitation Department.

Thus, it was noteworthy that the sanitation department adopted the complex processes for the ODF verification for the desired results in rural areas of Punjab.

**Table 1.20: Did you construct the community toilets in the village?**

Options	Number of officials	Percentage
Yes	47	39.16%
To a Large extent	0	0%
To some extent	43	35.83%
No	30	25%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.20 surprisingly indicates that 25% of officials reported that they did not work on community toilets in their jurisdiction although the community toilet was the main component of SBM Phase-I. Whereas, a very low majority (39.16%) of officials claimed that they constructed the community toilets in the villages and roughly 35.83% of officials stated that they did some work on it.

As a result, it can be said that Swachh Bharat Mission was struggling in rural Punjab regarding the community toilets.

**Table 1.21: Do you fine the people who are defecating in the open?**

Options	Number of officials	Percentage
Yes	0	0%
No	120	100%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.21 indicates that all of the (100%) officials of sanitation department of Ludhiana, Amritsar and Hoshiarpur districts claimed that they did not penalize anyone who were defecating in the open. Furthermore, the mentioned that they organized awareness campaigns for the people about the demerits of open defecation.

Henceforth, it is evident from the above table that Sanitation department was only organizing the seminars and conferences regarding cleanliness. Sanitation officials were not imposing any fine on people for open defecation.

**Table 1.22: What are you doing to stop the manual scavenging in your district?**

Options	Number of officials	Percentage
Awareness campaigns	120	100%
Fine to erring Panchayats	0	0%
Providing Machines to clean the drains	0	0%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.22 shows that all of the (100%) officials of three districts of Punjab stated that they organized only the awareness campaigns in rural areas to make people aware about the manual scavenging. An important fact which was significant that the officials implemented various efforts to stop the manual scavenging in rural areas of Punjab through the aid of awareness campaigns.

**Table 1.23: Which methods are adopted by your department to clean the drains and ponds in the village?**

Options	Number of officials	Percentage
Manually by labourers	120	100%
Through Machines	0	0%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.23 indicates that all of the (100%) officials of sanitation department of three districts of Punjab reported that ponds and drains were manually cleaned by labourers in the rural areas.

It was very disappointing that panchayats were still using traditional methods for cleaning ponds and drains. In this present time of scientific advancement, surprisingly sanitation department was still not providing the latest machines to panchayats for cleaning.

**Table 1.24: Are the Panchayats coming forward to stop the manual scavenging in the village?**

Options	Number of officials	Percentage
Yes	85	70.83%
To a Large extent	0	0%
To some extent	14	11.66%
No	21	17.5%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.24 highlights that a high majority (70.83%) of officials claimed that panchayats were coming forward to stop the manual scavenging in rural areas. It was beneficial for the village since the Panchayats were cooperating with sanitation officials to implement the SBM in a better way.

On the other hand, some (17.5%) of the officials stated that Panchayats were not addressing this issue and that their cooperation was not satisfactory regarding manual scavenging. Besides this, 11.66% officials stated that they received less cooperation from elected body (gram panchayat) in rural areas. However, the overall outlook of this scenario was positive.

**Table 1.25: Do you think that manual scavenging has stopped in Punjab under the prohibition of employment as manual scavenging and their Rehabilitation Act, 2013?**

Options	Number of officials	Percentage
Yes	97	80.83%
To a Large extent	0	0%
To some extent	10	8.33%
No	13	10.83%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.25 shows that a high majority (80.83%) of officials reported that manual scavenging had stopped in rural areas of Punjab under the prohibition of employment as manual scavenging and their rehabilitation Act 2013. On the other hand, some officials (10.83%) mentioned that manual scavenging was not yet stopped in Punjab. Moreover, they

explained that the people from labour class were still performing these actions in some areas of Punjab.

When it comes to see the overall scenario, then it can be outlined that the manual scavenging has been stopped in Punjab. It was pleasing to note that SBM was achieving their targets.

**Table 1.26: According to you, do people think that solid and liquid waste management is important for the cleanliness?**

Options	Number of officials	Percentage
Yes extremely important	105	87.5%
Slightly important	15	12.5%
Not important	0	0%
Can't say	30	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.26 highlights that a high majority (87.5%) of officials claimed that the viewpoint of people was positive regarding SLWM activities because they believed that SLWM projects were necessary for the cleanliness.

A noteworthy point was noticed that the development projects of SBM were achieving the desired results in rural areas. Sanitation department officials stated that people were gaining awareness about the SLWM activities due to the various efforts performed by the department.

**Table 1.27: Are you providing the adequate infrastructure (like dustbins) to panchayats to tackle the problem of solid and liquid waste?**

Options	Number of officials	Percentage
Yes	30	25%
To a Large extent	20	16.66%
To some extent	60	50%
No	10	8.33%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.27 indicates that half (50%) of the officials of sanitation department of three districts stated that they distributed the dustbins in the villages to some extent. Furthermore, 25% of officials claimed that they created the required infrastructure in the village for the management of solid and liquid waste. Besides this, 16.66% of officials mentioned that they gave the dustbins to the people to a large extent. However, a meager 8.33% of officials reported that they did not perform any activity in rural areas for SLWM. Thus, it can be concluded that sanitation officials were not providing adequate infrastructure to the panchayats.

**Table 1.28: Are you providing the information to households and panchayats about the segregation of wastage and WSP technique to treat the pond water?**

Options	Number of officials	Percentage
Yes	10	8.33%
To a Large extent	30	25%
To some extent	70	58.33%
No	10	8.33%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.28 shows that a majority 58.33% of officials stated that they provided to some extent the information to the households and panchayats regarding the segregation of waste and pond water treatment techniques, which was quite an unsatisfactory outcome. Only 25% of officials claimed that they provided the information to the people in rural areas to a large extent about the solid and liquid waste management. As a result, it can be said that sanitation department officials were not fully dedicated about the implementation of SBM Phase-II since they were not offering the information to the people about the segregation process.

**Table 1.29: What are you doing to manage the plastic waste in village?**

Options	Number of officials	Percentage
Make people aware about the reuse, reduce, recycling	120	100%
Encourage the panchayats to sell the Plastic to factories for reuse	0	0%
Encourage the people to use the plastic for gardening and other things	0	0%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>



The table 1.29 indicates that all (100%) of the officials stated that they made the people aware through seminars and conferences about the formula of reuse, reduce and recycling of plastic.

Therefore, it can be outlined that the sanitation department officials were performing their duties appropriately that resulted in the betterment of environment with the help of 3R formula.

**Table 1.30: Have your department established the plastic waste management units?**

Options	Number of officials	Percentage
Yes	20	16.66%
To a Large extent	0	0%
To some extent	40	33.33%
No	60	50%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.30 highlights that half (50%) of the officials of three districts of Punjab stated that they did not establish the plastic management units for the processing of plastic. They added that the government was not thoroughly committed about this facet of the project, which was very unfortunate. Only 33.33% of officials mentioned that they were doing work to some extent on it.

Therefore, it can be concluded that the sanitation department had not sufficient infrastructure to tackle the problem of plastic waste.

**Table 1.31: Where has your department established the plastic waste management units?**

Options	Number of officials	Percentage
At district level	80	66.66%
At Block level	40	33.33%
A village level	0	0%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.31 highlights that majority (66.66%) of the officials stated that their department was establishing the plastic management units at districts level. Besides this, a

low majority (33.33%) of officials mentioned that sanitation department was creating the infrastructure at block level for the processing and reduction of plastic.

As a result, it can be summarized that sanitation department of three districts of Punjab was creating an infrastructure at the block and district level for the processing of plastic waste as opposed to the village level.

**Table 1.32: According to you, which type of plastic needs to be recycled more often?**

Options	Number of officials	Percentage
High density polyethylene milk packets, shampoo bottles, water bottles, containers	90	75%
Polyethylene Terephthalate Beverage bottles, food containers, cleaning containers	30	25%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.32 shows that the viewpoint of officials about the recycled items. A high majority (75%) of the officials stated that high density items such as milk packets, shampoo bottles and pouches, water bottles and containers required more attention for recycling since these items are used daily by the people. On the other side, a low majority (25%) of officials mentioned that polyethylene terephthalate beverage bottles, food containers and cleaning containers should be recycled more than the above items.

**Table 1.33: What are the safe alternatives for land filling according to you?**

Options	Number of officials	Percentage
Composting	63	52.5%
Biological reprocessing	0	0%
Waste to energy plants	57	47.5%
Bioremediation	0	0%
Plasma gasification	0	0%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.33 indicates that a majority (52.5%) of the officials declared that composting was the best method for the reduction of wastage. Whereas, 47.5% mentioned that waste to energy plants were the safe alternatives of land filling.

As per this table, it can be concluded that composting and waste to energy plants were the two safe alternatives of land filling according to officials of sanitation department.

**Table 1.34: What is the Criteria for selection of site for solid waste?**

Options	Number of officials	Percentage
Geophysical condition of the village including topography, soil structure and ground water conditions	0	0%
Availability of common space in and around the village	4	3.33%
Economic status and human resources available of the GP	0	0%
All of the above	116	96.66%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.34 shows that a high majority (96.66%) of officials stated that they selected the site based on the combination of parameters such as geophysical condition of the village including topography soil structure and ground water conditions, availability of common space in and around the village and economic status and human resources of Gram Panchayat for the construction of compost pits. Whereas, 3.33% officials said that they selected the site only on the basis of availability of common space in and around the village.

As a result, it was deduced that the majority of sanitation officials considered all of the above parameters for the selection of space where they can construct the compost pits regarding solid waste management.

**Table 1.35: The count of pits for solid waste management depends on what parameters?**

Options	Number of officials	Percentage
Depend on population	120	100%
Fixed by sanitation department	0	0%
Fixed by Panchayat	0	0%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.35 indicates that all (100%) of the officials of sanitation department of three districts mentioned that the counting of pits was assessed according to the population of the village.

**Table 1.36: Does every village Panchayat has a waste collector for the door to door waste collection?**

Options	Number of officials	Percentage
Yes, every village has the W.C.	2	1.66%
Some Village Panchayats have the W.C.	28	23.33%
No Village Panchayat has the W.C.	90	75%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.36 shows that a high majority (75%) of the officials stated that the village panchayats did not have any type of facility of waste collector, as compared to 23.33% of officials mentioning that village panchayats had the waste collector.

Thus, it is very clear from the above table that solid waste management activities had stopped in the villages because a majority of gram panchayats did not have any resource for the collection of garbage from the individual households. According to the officials, only some gram panchayat were performing well in this field since they had a waste collector for the collection of garbage.

**Table 1.37: What are the common methods for the drainage of waste water in rural areas?**

Options	Number of officials	Percentage
Under-ground sewerage system	8	6.66%
Conventional sewer	112	93.33%
Soak Pits	0	0%
Any other	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.37 highlight that a high majority 93.33% of the officials specified that the drainage system of waste water in their rural areas was the conventional sewer and only

6.66% officials stated that some village panchayats had a facility of underground sewerage system.

Therefore, it is evident from the above table that rural areas of Punjab did not have an underground sewerage system which is not a positive reflection for cleanliness and hygienic lifestyle of people.

**Table 1.38: Are you encouraging the panchayats to use the biodegradable waste for compost?**

Options	Number of officials	Percentage
Yes	96	80%
To a Large extent	2	1.66%
To some extent	14	11.66%
No	8	6.66%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.38 indicates that a high majority (80%) of the officials mentioned that they were motivating the panchayats to produce the compost from biodegradable waste, which was a very positive factor in the implementation of SBM Phase-II. However, some 11.66% of the officials stated that they were encouraging the gram panchayats to use the biodegradable waste for compost to some extent.

Thus, it can be summarized that the officials were doing efforts in order to make people aware about the reuse of biodegradable waste.

**Table 1.39: Which is the biggest obstacle you faced during the implementation of this program?**

Options	Number of officials	Percentage
Lack of training among the staff	0	0%
Lack of funds	20	16.66%
Lack of staff	83	69.16%
Non cooperate behaviour	17	14.16%
<b>Total</b>	<b>120</b>	<b>100%</b>

The Table 1.39 indicate that a majority 69.16% of the officials stated that lack of staff members was the biggest hurdle for the better implementation of SBM. However, 16.66% of the officials mentioned that a lack of finance was also a major problem for this project. Furthermore, 14.16% of the officials reported that some panchayats and people were also functioning not cooperatively.

It is evident that sanitation officials faced some obstacles such as lack of staff, lack of funds and non-cooperation from other teams on the ground level for the implementation of SBM.

**Table 1.40: Do you organize the regular meetings with Panchayats for the better implementation of this program?**

Options	Number of officials	Percentage
Yes, regularly	97	80.33%
Some times	23	19.16%
Often	0	0%
Never	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.41 indicates that a high majority (80.33%) of the officials stated that they did the regular meetings with the panchayats for the better implementation of SBM projects. Whereas, only 19.16% stated that they organized less meetings with the panchayats.

As a result, it can be outlined that sanitation officials stayed in touch with the panchayats through the basis of regular meetings which can be concluded as positive outcome for this section.

**Table 1.42: Do you give any reward to ODF village?**

Options	Number of officials	Percentage
Yes	75	62.5%
No	45	37.5%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.42 shows that a majority 62.5% of the officials stated that they gave rewards to panchayats for getting the ODF status. These rewards aided in achieving a better performance report regarding sanitation, whereas 37.5% of the officials mentioned that they did not provide any reward to the panchayats for the achievement of ODF status which was quite unfortunate.

**Table 1.43: What kind of reward do you give to Panchayats for the ODF achievement?**

Options	Number of officials	Percentage
Prize money	0	0%
Trophy	0	0%
Appreciation Letter	80	66.66%
Any other	40	33.33%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.43 highlights that a majority (66.66%) of the officials stated that they gave an appreciation letter to those village panchayats who performed well in the field of Swachh Bharat Mission activities such as construction of individual household toilets, community toilets, compost pits for the management of solid waste.

As a result, it can be said that sanitation department officials were positively promoting the morale of panchayats through rewards for achieving better outcomes.

**Table 1.44: Do you issue the certificate to Panchayats for achieving the ODF status?**

Options	Number of officials	Percentage
Yes	0	0%
No	120	100%
Some times	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.44 highlights that surprisingly all (100%) of the officials stated that they did not issue any certificate to the panchayats for the achievement of ODF status. However, it is mandatory to issue the certificate according to the guidelines of SBM.

Thus, it can be summarized that the sanitation officials did not properly follow the guidelines of SBM on this matter.

**Table 1.45: Have your department officers got any type of training regarding SBM?**

Options	Number of officials	Percentage
Yes	20	16.66%
To a Large extent	0	0%
To Some extent	25	20.83%
No	75	62.5%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.45 majority that a majority 62.5% of the officials stated that they did not receive any type of formal training regarding Swachh Bharat Mission projects. This was very unfortunate since the public requires trained staff members for better implementation of SBM because untrained staff can't get the desired results in any field. Whereas, only 20.83% of the officials stated that they received the training from NGO (Round glass foundation) regarding SBM projects especially solid waste management, which can be inferred as a slight positive.

As a result, it can be concluded that lack of training among the sanitation officials was a major obstacle for the better implementation of SBM projects.

**Table 1.46: Have you formed the district and block sanitation committee?**

Options	Number of officials	Percentage
Yes	120	100%
No	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.46 shows that all (100%) of the officials stated that district and block sanitation committees were constituted for better coordination. It was noteworthy to mention that sanitation officials were aware of this aspect of the guidelines of SBM. Through these committees they are able to formulate the district sanitation plan comfortably.

**Table 1.47: Is there any website prepared by your department where people could lodge their complaints?**

Options	Number of officials	Percentage
Yes	120	100%
To a Large extent	0	0%
To Some extent	0	0%
No	0	0%
<b>Total</b>	<b>120</b>	<b>100%</b>

The table 1.47 highlights that all (100%) of the officials of sanitation department declared that they prepared a website where people could lodge their complaints. This can be attributed positively because it promoted the accountability in the working of sanitation officials and thus, it was very useful for the people because they can file their complaints within a matter of minutes without any harassment.



## CONCLUSION

In the end, it can be said that water supply and sanitation officials of three districts under study did a good work regarding SBM Phase-I activities. They were doing efforts to implement the SBM Phase-II activities. But their performance was not satisfactory regarding solid and liquid waste management's projects. Lack of staff was also a big problem in the department of sanitation of these districts. Due to this, they took a some help of NGOs to make people aware about SBM activities. Officials should follow the guidelines properly of Swachh Bharat Mission and Government should recruit more staff for vacant positions in the Department of Water Supply and Sanitation.