

Awareness Level about Impact of Single Use Plastic on Rural Life of Five Adopted Villages: A Social Work Intervention

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Abstract

Plastic is utilized at large scale at universe level and one of the major components of this plastic material is Single Use Plastic. Single use Plastic mean all the plastic materials, which are used for one time and thrown thereafter as; polybags, packaging materials, wiring covers, egg trays, wrappers, bottles etc. The blind utilization of these plastic materials is destroying the environment at large scale and creating health hazards and life threatening circumstances for all humanities and other lives on the planet. In this concern, researcher want to know awareness level about SUPs and their causes among people of five villages, adopted by BPS Mahila Vishawavidyalaya, Khanpur Kalan, Haryana and also try to find out the areas of Social Work Interventions to resolve the issue in the rural community. Descriptive-diagnostic research methodology has been used by the researcher with 200 sample size from these five villages through stratified sampling and data is collected through interview schedule. Primary and secondary data is used as per need. The study found that the level of awareness among rural people is very low and they don't have alternates to replace the SUPs in their daily life. People told that Government, Gram Panchayat and common man should come together to minimize the use of SUPs. Researcher found that Social Work intervention has very important role with community people, PRIs and Government, to increase awareness level and eradicate the harmful effects of SUPs

Keywords: Single Use Plastic, Health hazards, Panchayati Raj Institutions, Environment Pollution, Socio-Economic status, waste management, Rural society.

Introduction

Single use plastic has become a major threat to the humanity and environment. Community people started to use plastic bags, bottles and other types of single use plastic materials, sometime by choice or due to changing socio-economic, industrial, national and international circumstances. Now single use plastic has become a major issue, not only in urban communities but has spread its injurious and polluted sphere in rural community also. Everywhere in villages, we may find poly bags, plastic bottle, wrappers, egg tray, waste and unused other plastic materials. Irrespective of streets, yards, house, drainage system, water ponds, schools, dunghills areas, place for animal husbandry etc, plastic materials are adding to the insanitation, unhygienic, polluted and dangerous environment in the rural areas. Last year in 2019, on Independence Day, Prime Minister Narendra Modi appealed to the citizens to make the nation free of single-use plastics (SUPs) and to work towards this mission whole heartedly. Prime Minister of India, Shri Narendra Modi said in United Nation's Conference that Single use plastic has become a serious issue in front of the whole world, therefore, now the time has come, when we all world should be together to say goodbye to the single use plastic.

Single Use Plastic

Single use plastic means all the plastic materials in our daily life, which can be used for only single time and thrown away after that use.

Such plastic materials are just for one time use and after they are clashed in an unmanaged and unplanned way, which has become a great threat to the environment, as well as our society. The most common examples of the single use plastic are as follows-

1. Frames of the eyeglasses, other products, plastic pipes, and wirings.
2. Egg trays, toys, packaging waste of the domestic products, covering and packing of electronic products.
3. Wrappers of packed foods, beverages, cold and soft drinks and packing of lot of domestic use food products.
4. Plastic material used in building construction, door, windows, floors, roofs.
5. Plastic bottles, products waste in nuclear activities etc.
6. Accessories, plastic films, agriculture products and various educational and industrial uses plastic materials etc, all are the examples of the single use plastic, which are highly harmful for our environment as well as our life.

National Action Plan for phasing out Single Use Plastic

National Plan for proper management of the single use plastic material has been prepared and it has been decided that the plan would be implemented phase wise. The policy makers have to know the all corners of the issue and should drive a series of research work on the potential of the alternate products, their cost effects, acceptability in the community and their quality and quality production as the requirement in the large population of India. Thereafter, such areas will be identified, which has easy, accessible, socially accepted and affordable alternatives. The alternate products would be publicized among the community, people would be made aware about the products, their benefits and easy to handle and simultaneously people would be motivated to start such production units so that the quantity of the products may be provided to the people as per their need.

Availability of Alternate Options in Place of Single use Plastic

The most common and most harmful single use plastic is polybags, which are used in India at large scales and destroying the environment, water, soils and human life largely. These bags maybe replaced by the jute bags, cotton bags, cloths bags and other such bags, prepared with paper, wood, plants or cloth materials. These all products will be environment friendly and also will be durable use and most importantly, beneficial for our life. About the replacement of various plastic bowls, glasses; the 'Kullad' may be used, which are not only an environment friendly, but also good as far as health concern. In addition to it, about the various accessories and other packaging materials, we can replace them with cotton, wooden, jute and paper materials, which will be very much beneficial in replacement of SUPs at a large scale.

The above mentioned all products will not be only used for domestic use bags or packing of some products, but if the Government formulate a strong policy framework and the manufacturing of such alternates is done at large scale, there is not any doubt that we can replace the single use plastic successfully at large scale.

Above actions should be taken at priority level, which should be followed by a long series of various other actions, as the communication channels about the replacement should be very strong and fast. The common man should be made aware about the use of new alternates and bad effects of the SUPs. The Center Government, State Government and Local Government as Gram Panchayat should play an important role in communication and information to the grassroot level.

On the basis of above all, the Gram Panchayat of all five villages i.e. Kasanda, Kasandi, Gamri, Garhi Ujale Khan and Kakana, adopted by the BPS Mahila Vishawavidyalaya in collaboration with BPSMV faculty and students and District administration with support from local NGOs, can play an important role in eradication of the serious issue of single use plastic in these villages.

Rational of the Study

Single Use plastic has become a grave issue in all communities and rural community is suffering from this highly. Recently, Prime Minister of India talks about the proper management and disposal of Plastic materials. As plastic has become a major issue in all around the world and five villages, which are adopted by BPS Women University, are also not untouched from this. Therefore, researcher want to know the views of community people about the Single Use Plastic and aware them about the various bad impact of SUPs and proper management and disposal of this material, so that the health hazards of plastic to the community people may be minimized.

Objectives of the Study

1. To know the Socio-economic profile of the rural community.
2. To know and analyze the awareness level about single use plastic among rural people.
3. To know the scope of social work intervention in management and disposal of single use plastic in rural community.

Universe of the Study

The study has conducted in five villages, Kasanda, Kasandi, Kakana, Garhi Ujale Khan and Gamri, Sonapat District, Haryana, which are adopted by BPS Mahila Vishawavidyalaya. The respondents are selected from the all community members and all groups on the basis of sex, age and occupation etc.

Research Design

The study has adopted descriptive-diagnostic research design with a sample size of 200 respondents was selected through stratified random sampling method from five villages, Kasanda, Kasandi, Kakana, Garhi Ujale Khan and Gamri. Primary and secondary data is utilized for the study. Primary data is taken through interview schedule with

open ended and closed ended questions and FGDs with various groups of the community. Out of 200 interview schedules, 179 are received in completely filled form. Secondary data is taken from Ministry of

Environment, Forest and Climate Change, various websites and other online sources. The statistic tools, utilized for data analyses are; tabulation, cross tabulation, average and percentage methods.

Analysis and Interpretation of Data

Table-1.01 Socio-Economic Profile of the Respondents

Sr. No.	Responses	Percentage of Responses
1	Sex wise Distribution	
A	Male	65.50 %
B	Female	34.50 %
Total Responses		100.00 %
2	Age wise Distribution of Responses	
A	Upto- 20 Years	17.30%
B	Between 20-40	51.00%
C	Above 40	31.70%
Total Responses		100.00 %
3	Education Level wise	
A	Illiterate	22.20%
B	Upto Schooling	61.45%
C	Graduation and Above	16.35%
Total Responses		100.00 %
4	Category Wise Distribution	
A	SC	21.25%
B	BC	30.42%
C	General	48.33%
Total Responses		100.00 %
5	Occupation Wise Distribution	
A	Daily Wagers	16.50%
B	Self Employment	08.50%
C	Farmers	42.55%
D	Landless Farmers	05.40%
E	Service	11.50%
F	No Employment	09.35%
G	Any Other	06.20%
Total Responses		100.00 %

Above Table expressed the socio economic profile of the respondents as follows-

- About sex, 65.50 percent respondents are male and 34.50 percent are female.
- About age of the respondents, 51.00 percent respondents belong to age group of 20-40 years, 31.70 percent belongs to above 40 years and 17.30 percent belongs to up-to 20 years.
- According to education level, highest number 61.45 percent respondents are up to schooling, 22.20 percent are illiterate and 16.35 percent are Graduates and above.
- About their Category, 48.33 percent are General, 30.42 percent are Backward Class and 21.25 percent are Scheduled Castes. It's the data

almost equal as per the census data in these villages.

- The occupation wise facts are received as, 42.55 percent are farmers, 16.50 percent are daily wagers, and 11.50 percent are engaged in service sector. (the service sector includes government jobs and private jobs from official rant to class-4 level), 09.35 percent said they don't have any employment. (maximum of them were females, those were busy in their household work), 8.50 percent are self- employed, 05.40 percent are landless farmers and 06.20 percent belongs to Any other category, which includes- seasonal work, part time work, personal business etc.

Table-1.02 Awareness level among Rural People about Single Use Plastic

S.No	Responses	Percentage of Responses
1	Extent of SUP	
A	Great Extent	64.30%
B	Low Extent	21.70%
C	Can's Say	14.00%
Total Responses		100.00 %
2	Awareness about bad impacts of SUP	
Types of Effects of SUP		
A	Environment	06.11%
B	Human Health	05.00%

C	Animals/Birds	01.37%
D	On All of above	80.33%
E	Can't Say	07.19%
	Total Responses	100.00 %
3	Cause of Using SUPs	
A	Easy to Carry	43.20%
B	No alternates	03.10%
C	Alternates are expensive	10.40%
D	Its Not a Choice	41.30%
E	Can't Say	02.00%
	Total Responses	100.00 %
4	How you Manage/Dispose SUPs	
A	Through in Dustbin	43.71%
B	Sale them	12.10%
C	Burn Them in <i>Chulha/Angithi</i>	21.00%
D	No Such Plan	23.19%
	Total Responses	100.00 %
5	Awareness about Ban on SUP	
A	Yes	37.25%
B	No	62.75 %
	Total Responses	100.00 %
6	SUP should be Ban or Not ?	
A	Yes	69.30%
B	No	21.94%
C	Can't Say	09.34%
	Total Responses	100.00 %
7	Any Suggestion	
A	Govt Should Ban Manufacturing	54.30%
B	Cheap and affordable Alternates	10.00%
C	Resale Price should be raised	09.44%
D	Gram Panchayat should take Initiative	14.88%
E	People Should be made aware about it	17.18%
F	Any Other	04.20%
8	Total Responses	100.00 %

Table no. 01.02 highlights the responses about the awareness level of community people about single use plastic. It is found that-

- About extent of use of SUPs in their family, 64.30 percent said at great extent, 21.70 percent low extent and 14.00 percent were not able to reply exactly about the use of plastic in their house.
- Awareness about bad impact of SUPs, highest responses are received that 80.33 percent community people told that it influence all of above (i.e. environment, animals/birds and human health), about impact on environment 06.11 percent , about human health 05.00 percent, about animals/birds 01.37 percent and a significant 07.19 percent people are not able to reply to this question.
- 43.20 percent respondents told about the causes of using SUPs, that it is easy to carry, on the other hand, almost similar number of people 41.30 percent told that they don't have options, rather they are forced to use them.
- About the managing or disposing of SUPs, maximum respondents with 43.71 percent replied they through them in dustbin. 21.00 percent told that they use them to burn in *Chulha/Angithi*, 12.10 percent told they sale them to the scrapers or Kabadis and number of people 23.19 percent don't have any proper system or plan for their management or disposal. Those who are burning

the SUPs, when researcher told them that the incidents of cancer patients are increasing in the rural areas and burning of SUPs is one of a very important reason of cancer. In the continuation of this fact; many of them told about some families/neighbourers/relatives, who burn the plastic and have various respiratory or other disease.

- Then they are asked whether they know about the Government Policy for ban of various SUPs. In this reply, 37.25 percent said yes, 62.75 percent replied said that they don't know about this.
- Next question was asked to them, whether SUPs should be banned or not. In this response, the facts are received that 69.30 percent respondents said yes it should be banned, 21.94 percent surprisingly said No and 09.34 percent are not able to reply to this question.
- Last question was asked to them about the suggestions to tackle the issue of bad impact of SUPs on society as a whole. The responses for this question are received as follows- 44.30 percent said Government should ban them, 17.18 percent said people should be made aware about it, 14.88 are with the view that Gram Panchayat should lead from the front, 10.00 percent told that cheap and affordable alternate options should be

provided, 09.44 percent told if the resale price will be enhanced, the people will automatically start to manage/dispose them properly. In last responses, 04.20 percent belongs to Any Other category, where they told about arrangement of a specific place for dumping, use loose commodities in cotton bags, making Jugad from Kabad, Government should initiate technology to use SUPs in road construction etc.

Conclusion

1. The maximum participation of community people in the study on the basis of various socio-economic factors is as follows- Male as compare to female, 20-40 age group community people, people with education level up-to schooling, general category, farmers and daily wagers are factors, which were most influensive, as far as highest participation concerns.
2. Next responses about the awareness about SUPs are received as- Maximum people with 64.30 percent use various sort of SUPs in their family. The rich houses use plastic material more as compare to poor families. It is important to mention here that the consumption of SUPs in higher in the families, which are economically sound as compare to poor families.
3. Significantly a great number 80.33 percent people know that its harmful for them, including environment, their animal husbandries and birds, still they use them frequently.
4. 43.20 percent respondents told about the causes of using SUPs, that it is easy to carry, on the other hand, almost similar number of people 41.30 percent told that they don't have options, rather they are forced to use them. They are with the view that everything delivered them in plastic packing, so how they are the deciders to say no or yes?
5. 43.71 percent told that they use dustbins to throw or dispose the plastic wastes, whereas 23.19 percent have not any proper routine to manage/dispose the SUPs in their homes. One important fact is received that 21.00 percent told that they burns the poly bags, wrappers and other plastic materials in their *Chulahs or Angithi*.
6. 62.75 percent are not aware about the ban on plastic materials and 32.25 percent said yes, they are aware. Important fact is that those, who are not aware about this, ban on plastic is just a silly thing to say by shopkeepers. Actually shopkeepers don't want to give poly bags so they say such type of false things.
7. 69.30 percent said that SUPs should be banned. Very important point here is that though great number of people don't think that plastic is any big problem for them, still the number of people to support Ban on SUPs is high, because during the interview with respondents, when there was discussion about the bad impact of SUPs by the researcher, then many of them changed their view and told that if plastic is so harmful, so it should definitely be banned.
8. The last question was asked to them about any suggestion over the issue. In the reply to this,

highest responses are received 44.30 percent that if plastic is so harmful, why the Government should not stop its manufacturing? Though a significant number of people 17.18 percent told that there should be awareness generation programmes for people, so that they may know about the bad impact of SUPs and make them to think about alternate options.

9. While interacting with the community people, it was found that people said that main reason of scattered plastics wastes is lack of sufficient sweepers, on the other side, Sarpanch said due to financial grant limitations, they can't hire more sweepers for the task.
10. It is also a fact that sweepers are also not doing their task properly. Researcher observed many places, where sweepers have done the cleaning work, but still there was lot of plastic waste in streets, drains, around the water pond and dumping yard. The situation of streets/ drains was no better near some of Sarpunches's house.
11. Many people, particularly male some of young age and elderly were not ready even to listen to the issue.
12. Number of people said it is completely duty of the Sarpanch to maintain the village neat and clean.
13. Some interesting incidents are observed that we are interacting with community people about proper disposal of SUPs. One side, they are showing their consent that yes, we will make a proper system of SUPs management, simultaneously, on the other side, they are throwing the wrappers and bottles in the streets.

Scope for Social Work Intervention

1. As a result of the study, it may be suggested that as we are aware that in the rural areas, awareness level of people about the bad impacts of the SUPs is very low, so there should be proper and effective awareness generation activities in a collaborative approach by inclusion of Government administration, schools, colleges, universities, off-course voluntary organizations and our religious leaders. In this regard, Social Work may play a crucial role as a consultant, mediator, advisor, facilitator, enabler and guide.
2. Manufacturing of better, cheap and easily available alternates should be promoted and established at large scale, so that the packing, wrapping and delivery of goods may be made in these safe alternatives easily and quickly and social work may take the issue to the Government about providing such alternate sources to the community.
3. Panchayati Raj Institutions (Gram Sabha, Gram Panchayat, Block Samiti and Zila Parishad) should take lead in proper management or proper disposal of the waste SUPs in their respective villages. (When Gram Panchayat can pick sticks in their hands to ensure ODF, why not for managing the issue of SUPs?) Social Worker can play with PRIs to facilitate, guide and mediate the necessary actions.

4. Youth Groups should be formed in the villages for volunteer actions on managing and disposing of SUPs in the villages.
5. Community Engagement actions should be taken with Community People, PRIs and Gram Sabha
6. Conducting FGDs and Formation of SHGs to ensure regular meetings and awareness sessions among the people.
7. Inclusion of Anganari Workers, Health staff to discuss about impact of SUPs with people.
8. Regular education programmes to bring Behaviour Change among the people.
9. Conduct Group Work Exercise and Community Organization actions with various groups on SUPs in village and schools.
10. Conducting street plays, display documentaries to visualize the bad impacts of the SUPs in the rural community.

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