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PEOPLE-CENTRED APPROACHES TO WATER AND ENVIRONMENTAL SANITATION

Community Hygiene Promotion through Human Resources Development Programme, PHE Dept – impact in Manipur, India

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The Meitei community of the Manipur valley in the northeastern part of India has an in-built socio-cultural traditional cleanliness. The Human Resources Development Programme of Public Health Engineering Department has taken up, with good progress and results, the community hygiene promotion programme for a better future of the inhabitants of the valley areas.

Introduction

Manipur, a hilly State is the north-easternmost part of India bordering Myanmar. The capital Imphal valley in the central portion, which is at 790m above MSL with an annual rainfall of 1407 mm, is surrounded on all sides by hills. The Meiteis who are the majority inhabitants of the valley traditionally believe that water is the source of all forms of life. The idea of this belief along with various aspects of the development of human society is depicted clearly in their traditional Lai-Haraoba ceremony. Lai-Haraoba is an annual community event which Meiteis have been performing since time immemorial.



Figure 1. Traditional daily morning prayer

The traditional daily routine domestic life of a Meitei family starts in the morning by offering water, flowers and burning incense to the Almighty after a mandatory morning bath and dressed in newly-washed clothes by the housewife. In the morning at the entrance of every home, which has been cleaned and swept, one will see some flowers on a plate, a small copper container with full-brim water and burning-incense.

The preparation of food usually by the housewife who has not taken bath is not allowed. For 6 days during the menstruation period she cannot prepare food. It is not a surprise in the Meitei Society when office-going husbands are the sole cooks of the family for a period of 6 days once in a month. At the end of 6 days of menstruation the woman has to wash her hair with CHENGHI, rice-washed-water boiled with particular herbs, and all her personal effects are thoroughly cleaned and washed with water. It is also customary as well as mandatory that Meiteis take morning meals only after bath.

In the valley area every household has a private latrine generally pit latrine, which is wet. Meiteis used to wash their hands with mud or ash after anal cleansing. For some orthodox Meiteis bath is compulsory after every entry to the latrine.

In spite of all their traditional and customary beliefs and practices regarding water and sanitation, general awareness about the relationship between water and sanitation and its linkage with health is low even though there is a semblance of neatness and cleanliness in the Meitei society.

When the water supply system fails, the community sometimes use only alum for treating raw water otherwise they don't know what to do and they simply go to other unprotected sources. They are unaware of low-cost sanitary latrines. Disposal of human excreta and other solid and liquid waste systems is very unhygienic.

Method

The Public Health Engineering Department (PHED) under the Human Resources Development (HRD) programme started the conduct of Grass Root Level Training (GRLT) programme on water supply and sanitation during 1997. Under the programme a minimum of one Grass Root Level Worker from each of the State's 2815 habitats is identified to be trained in a 4-day GRLT programme in a batch of 20 trainees on rural water supply and sanitation. Such training programmes are conducted at different places for the conveniences of the trainees. The aim is to create a team



Figure 2. Grass Root Level Training Session

of adequately trained and capable grass root level workers specially women through well-conceived training programme incorporating topics of community participation, water, sanitation and hygiene. The aim is also to generate demand—driven approach from the Grass Root Level for the ultimate objective of sustainability of rural water supply and sanitation (RWSS). The trained grass root level workers in turn train the community at the local level.

The training is conducted in such a way that each and every trainee is fully aware of the linkage of health with water, sanitation and environment. The training programme elaborates on how to dispose of solid and liquid waste including human excreta and how to get safe water. At the end of the training programme, trainees are also capable of repairing minor problems with handpumps and other simple components of rural pipe water supply scheme.

The main features of training programme are

- Audio-video shows on how diseases are spread by water and techniques to solve these problems;
- 2) Practical demonstration and actual installation of handpumps;
- 3) Demonstration of the quality of safe water with the help of field-kit; and
- 4) Simple and impressive films on how to construct low cost sanitary latrine, garbage and soakage pit.

Simple and illuminating objective-type-questions on hygiene practices which are only to be ticked for answering to create self-confidence and motivate the participants.

Impacts

Major impacts of the programme on the hygiene practices of the community are (1) Hand washing with soap after toilet (2) handling of drinking water and (3) Spreading of ash at regular interval over garbage specially kitchen waste, collected in the KOM (garbage pit). During the training programme it is ascertained from the trainees themselves that majority of the people of their locality wash their hands after toilet only with water. After the training they start using soaps while washing hand after toilet.

A monitoring team usually visits the locality after one month of the training in that area. During the visits, the team found out that a soap-cake is kept near the toilet of each of the 25 houses (average) in a locality for the purpose of hand washing with it after toilet. It was also observed that particularly children of the locality no longer offer drinking water to visitors in tumblers with their index fingers dipped in water as was done previously. Ash pots are also seen in the houses for spreading over the garbage in the KOM. The impacts of these hygiene practices are reflected in the health status of the community as recorded by the State Medical Department.

The year wise record of the Medical Department, Government of Manipur in respect of the number of reported death and cases of water borne diseases at two different habitat areas where GRLT programmes were conducted and not conducted are shown below:

Table 1.				
Year	At UCHEKON Health Sub- Centre Habitat areas where GRLT was conducted dur- ing June 16–19, 1999		At KSHETRIGAO Health Sub-Centre Habitat areas where there was no GRLT Programme	
	Number of reported cases of water-borne diseases	Number of reported death due to water-borne diseases	Number of reported cases of water-borne diseases	Number of reported death due to water-borne diseases
1999	34	Nil	40	Nil
2000	27	Nil	48	Nil
2001	27	Nil	53	Nil
2002	20	Nil	64	Nil

The morbidity rate has certainly decreased even though mortality rate has no significant changes in the habitat areas where GRLT is conducted. But at the localities where there was no GRLT the trend of morbidity rate is increasing and mortality rate has no significant changes.

The effect on the Human Resource Development by the programme are outlined below:

1. Increasing numbers of low-cost latrines:- Low cost technology of sanitary latrine is practically implemented with ease by the users. A number of low-cost two-pit-pour-flush-water-sealed sanitary latrines have been constructed in the habitat areas where GRLT programmes were conducted, even though the villagers are poor. This is possible because of the motivation by the WATSAN (Water and Sanitation) Committee formed by the trained Grass Root Level Workers and "MARUP". Earlier the villagers have the notion that construction of a good sanitary latrine is beyond the scope of their income. MARUP is usually formed with a minimum membership of 20. Each member subscribes Rs. 200/-per month. The total collection of Rs. 4,000/- per month is allotted to a member by lot. With a sum of Rs. 4,000/-

sanitary latrine is constructed by the awardee. In turn all the 20 members of the MARUP construct their own sanitary latrines. And the foul smell of faeces in the locality has been checked. Even in areas where there is no Marup low-cost latrines are constructed individually. Four low-cost latrines were constructed in one locality, KACHIKHUL, within one month of the conduct of the training programme.

- 2. Adoption of aeration filtration for removal of excess iron from tube-well water:- The community adopts the easy and simple means of solutions provided by the HRD programme to meet the requirement of safe water. They follow techniques of aeration and filtration of tube well water to remove excess iron. It simply solves a problem which causes quite an inconvenience to their daily chores.
- 3. Community participation in the operation of water supply schemes:- At times when there are time lapses in releasing Government fund for operation and maintenance of water supply schemes the motivated community manages to arrange fuel for the operation of pumps of the scheme. To fulfill the objectives of the programme more than 500 people in the valley areas of Manipur are yet to be trained.

Imparting skills and knowledge of water supply and sanitation to the community sensitize the villager to the extent that water and sanitation which were taken for granted earlier have become a moot point discussed in the gossiping circles of the elderly people. They start doing things knowingly in respect of hygiene in relation to water and sanitation. For example they know the reasons for washing hands with soap, why fingers should not be dipped in drinking water, etc.

The quality of village environment has been improved particularly because of the construction of household latrines and spreading of ash at regular interval over garbage, especially kitchen wastes, collected in the KOM (garbage pit). Solid waste management, particularly, unhygienic disposal of human excreta has been dramatically improved. Handpump platforms are also kept clean. Foul smells and unsightly garbage are no longer felt and seen in the locality. Urine to be used as fertilizer is another technology for sanitation which may be incorporated in the training programme. This is not yet done even though some individuals successfully tried, without any extra cost, using of stored and diluted urine as fertilizers on potatoes and chilli plants.

The technologies adopted in the training programme are appropriate and also cost effective. There have been lesser complaints from the areas where training programme were conducted to the Government authorities regarding failure of safe water supply as the communities are involved in maintenance works.

There has been an overall marked improvement in the well being of the community wherever Community Hygiene Promotion Programme is conducted.

But some of the poor villagers always think that safe water supply is the sole responsibility of the Government. Built-insupply-driven-attitude of the community has the mind-set of subsidy. Illiteracy is another hurdle while transferring written papers on RWSS to trainees. Law and order problems due to insurgency in the State also create inconveniences to the logistic of the training programme. Nevertheless the trained grass root level workers are motivated and they started participation in the maintenance works of handpumps and pipe water supply schemes.

Conclusion

The activities of HRD programme of PHED can be easily replicated. The programme is very popular because it concerns sanitation especially disposal of human excreta in a hygienic way that too in a very low cost mode. Often local Clubs of the habitat areas where GRLT was conducted, organize community gathering for the lecture presentations and other practical demonstrations on water, sanitation and health & hygiene by the officials from PHED. The trained grass root level workers are proud of their capabilities and message is spread to the neighbourhood. With further inputs from the Government in the forms of funds, logistic support and latest technology findings of water supply and sanitation the whole rural communities of the valley of Manipur may be easily served if the present trend of PHED activities is maintained and the targeted promotion of hygiene among the communities will be achieved very soon. The community hygiene promotion programme along with the in-built socio-cultural traditional cleanliness of the Meitei Society is all set for a better future.

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