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PEOPLE AND SYSTEMS FOR WATER, SANITATION AND HEALTH

KAP study on hygiene, sanitation and safe water use, Bangladesh

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IN ORDER TO reduce mortality, morbidity and malnutrition due to diarrhoea and other water-related diseases, especially among poor women and children, the Department of Public Health Engineering (DPHE) and UNICEF have come forward to implement a project called, Environmental Sanitation, Hygiene and Water Supply in Rural Areas (ESHWSRA).

It has been decided that a baseline survey on Knowledge, Attitude and Practices (KAP) will be conducted in the 35 low water table and saline belt districts. The purposes of the baseline survey are to ascertain baseline information on the existing KAP on water, sanitation and hygiene for comparison at the end of the project intervention and to collect relevant information on the target group to provide a basis for planning hardware and software. It was also decided that in order to avoid any methodological error in the baseline survey in 35 districts, a pilot baseline survey was conducted in one of the seven first phase districts of the project area. The baseline information of the existing Knowledge, Attitude and Practices (KAP) of the people on sanitation, hygiene and water supply was collected in Sarail Upazila (Sub-District) of Brahmanbaria District. Brahmanbaria district is located on the eastern part of Bangladesh. Sarail Upazila is located at the northwestern part of Brahmanbaria district.

For this baseline survey, 30 field investigators and three supervisors were selected locally by the Upazila Nirbahi Officer (UNO). The Monitoring Division of DPHE conducted two-day orientation training on the baseline survey methodology and hygiene behavior change programme with the technical assistance of UNICEF. The pilot baseline survey was conducted during 11-14 September 2000, by field investigators. Thirty trained investigators using the 30 cluster-village-survey methods interviewed respondents of 1050 households in seven Unions of Sarail Upazila. The objectives of the baseline survey were:

- To provide bench-line information of KAP of the target population related to hygiene before project interventions.
- To identify specific indicators which will be used to monitor progress.
- To measure the project impact by comparing the baseline information with periodic monitoring data.

Methods of data collection

a) Interview: A pre-coded questionnaire was developed for the interview. Mothers of the household were the

first choice for the interviewer as primary respondent since they are the most appropriate person to answer the questions related to the hygiene and health of a family. However, there is a tendency of respondents to give the desired answer regarding the hygiene behavior, which does not reflect their real behavior.

- b) Demonstration: By demonstration, the actual behavior practices were understood. Although, there is a possibility to demonstrate the best practices in front of the investigators which is not always the case under the normal circumstances.
- c) Observation: Through observation, gathered the most reliable information about one's hygiene behavior.

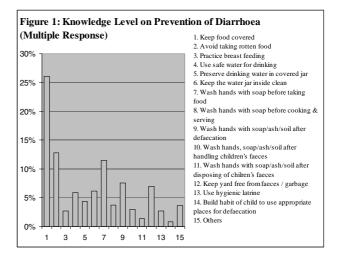
Key Findings

Socio-economic status of households:

Among the head of households 41% were illiterate, 67% of the head of the households were found marginal farmers, 30% small farmers and only 2% of them having land more than 10 acres.

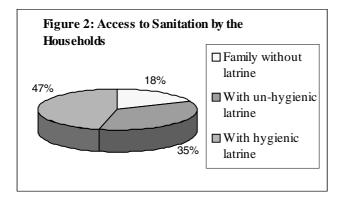
Incidence, prevalence and management of diarrhoea:

Knowledge level on diarrhoea was found very low, only 3% respondents answered the correct meaning of diarrhoea. The incidence and prevalence of diarrhoea was very low and causes of diarrhoea were not known to most of the respondents.



Sanitation status:

About 82% households in Sarail Upazila have access to latrines (hygienic and un-hygienic), while the rest of the

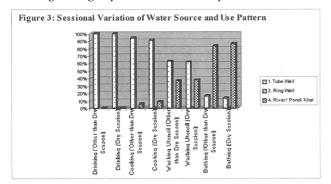


households did not have any fixed place for defecation. But among the latrine users 47% were using hygienic latrines.

The reported defecation sites for the men and women were found 35% for hanging latrines, 28% for water seal latrines and 19% for pit latrines respectively. It is found from the survey that 64% boys and 62% girls under five years of age defecate in the courtyard. Whereas only 11% among boys and 9% girl under 5 years of age defecated in hygienic latrines. It has been observed that there is a strong relation between the access to sanitary facilities and the economic condition of the households in the study Upazila.

Water sources and use patterns:

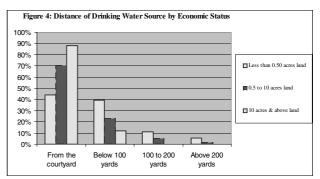
Use of tube wells for drinking water was almost 100% in the survey area but for washing utensils and bathing its use was only 63% and 16% respectively. There was no sharp variation regarding the accessibility of tube well water for drinking during dry season in the study area.



It was found that ownership of the tube well varies according to the economic status. About 43% of the marginal farmers (having less than 0.5 acres of land) owned tube wells, whereas small farmers (having 0.5 to 10 acres land) and landowners with more than 10 acres of land owned 71% and 80% of the tube wells respectively. An interesting finding was that 27% of the marginal farmers and 15% of the small farmers arrange tubewells in collaboration with their neighbors.

Distance of drinking water sources by economic status:

Among landowners, 80% with more than 10 acres of land owned tubewells and while 88% of this group collected water from their own courtyard. And only 43% of the marginal farmers owned tube wells and 44% of the marginal farmer collected water from their tube wells.

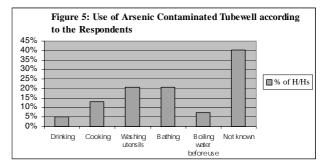


Arsenic issue:

More than 80% of the tube wells are yet to be tested for arsenic in the survey area. Only 17% tubewells were tested in this area and 13% of these tube wells were found to be free of arsenic while 4% were arsenic contaminated.

Households knowledge on arsenic:

The respondents had very little knowledge about the presence and use of arsenic contaminated water. 40% of the respondents had no idea about the use of arsenic contaminated water. 40% of them mentioned washing utensils and bathing as the alternative uses of arsenic contaminated water.



Knowledge on symptoms of arsenicosis by economic status:

Knowledge level on symptoms varied according to the economic status of the households. More than 80% of the marginal farmers and 67% of the small farmers do not have any knowledge about the symptoms of arsenicosis. More than 50% of the farmers who own more than 10 acre of land knew about the symptoms of arsenicosis.

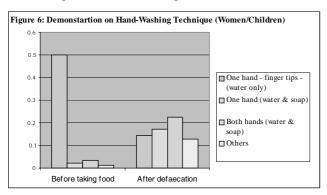
Hand washing practices by asking:

96% of people were found to use only water, while only 4% of them used soap before taking food.

It is revealed that 74% of respondents used any kind of agent for washing hands after defecation, of which 33% used soap, 8% used ash and 23% used soil. Hand washing practice after disposal of children's feces among mothers were poor, only 46% used only water and 27% did not wash hands at all after disposal of children's feces.

Demonstration on hand washing techniques:

Through demonstration it was found that 50% of people of Sarail upazila wash only one-hand (only fingertips) before taking food. It was also found that more than 22% people of the study area washed both hands with water and soap after defecation, while this figure was only 4% in case of washing hands before taking food.



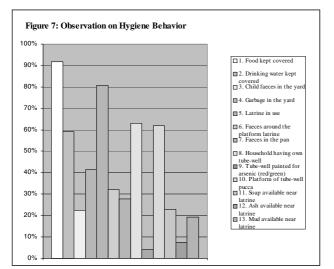
Observation on hygiene and environmental sanitation:

A majority of households were observed to use lid/cover over the food and 59% used lid to cover drinking water.

About 22% households were found with feces lying in the yard, while 41% households dumped garbage in yards.

About any kind of latrine users (hygienic and un-hygienic), 81% latrines were found currently in use, in 32% cases feces were found around the platform of latrines and in 28% latrines feces were found in the pan.

Soap were found near latrines in 23% of households while ash were found near latrines in 7% and in 19% households soil were observed near latrines.



Observation on carrying drinking water from sources:

It was observed from the baseline survey that more than 62% of the households were carrying drinking water in an un-hygienic way.

Observation on eating raw fruits/vegetables:

In 58% cases it was observed that people were eating raw fruits/vegetables properly, after washing, while in about 31% cases were found that they do not wash before eating them.

Conclusions

In the survey there was a provision of cross checking answers of the respondents since various survey tools were used for the survey e.g. asking, demonstration and observation. The strategy to train the local people as investigators also brought some benefit to the programme as they are also playing an advocacy role for the programme.

The findings of the baseline information have already been presented to the members of the Project Management Unit (PMU) and several important feedbacks have been given by them to incorporate in the full scale baseline survey. It has been also decided that instead of distance it is more important to know the time to collect water. Some of the major findings of the baseline survey which gave important directions for the design of the project interventions are that more efforts is required to change from an unhygienic latrine to a hygienic latrine then encouraging to build new ones. Because 35% of respondents have hanging latrines (feces are not confined), and 18% have no latrine at all. It was also revealed that most of the people rely on tube well water for drinking but for bathing and for other household use they still depend on other sources of unsafe water (ring well, pond, canals etc.). There is a need to generate awareness about the adverse affect of arsenic in this area.

It was also evident that most of the people don't have clear conception regarding preventive measure of diarrhoea. One of the major survey findings was that people undermine the importance of hand-washing practices before taking food than after defecation. Therefore, for thee programme, there is a need to raise awareness of target people in the programme regarding the fecal-oral disease transmission route so that they can adopt safe hygienic behavior.

Reference:

AHMED, A., Khan, S., and Alam M. (2000) "Pilot Baseline Survey in Sarail Upazila of Brahmanbaria District". Pilot baseline survey report for the Environmental Sanitation, Hygiene and Water Supply in Rural Area (ESHWSRA) project, prepared by UNICEF & DPHE.

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