Research into Use Summary

- **1. Research Project:** *Impact of hygiene intervention to reduce weaning food*
- contamination in Bangladesh
- 2. Lead researcher: Dr Sirajul Islam, ICDDR,B
- 3. SHARE Partners: ICDDR,B
- 4. Research budget: £60,368
- 5. Location: Bangladesh

Research description:

This research project aims to investigate whether hygiene promotion is effective in reducing weaning food contamination in Bangladesh. It will be based on a recent ground-breaking intervention study of weaning food hygiene in Mali. A total of 60 households in rural Matlab, Bangladesh, will be selected for the study (30 control and 30 study households). Two types of weaning foods – khichuri (combination of rice, lentils and vegetables cooked with oil) and suzi (combination of semolina, milk and sugar) – will be collected from all the households and analysed for microbial contamination just after cooking and before the child is fed. The intervention will involve field workers visiting the 30 study households over a four-week period to advise the mothers about handwashing with soap and food hygiene at critical control points (after visiting the toilet, and before preparing and handling food). After the intervention, food samples from all households will be collected and compared with each other and the baseline data to assess the impact of the hygiene intervention.

What is the relevance of the research to national and/or global sector challenges?

Contaminated weaning foods account for a substantial proportion of diarrhoeal diseases among infants and young children, especially in developing countries. For example, up to 70 per cent of diarrhoeal episodes could be due to pathogens transmitted through food. Recent research in Mali showed how simple measures could achieve large reductions in the numbers of faecal bacteria ingested by young children, and this project aims to confirm or qualify these very positive findings. If these simple measures are deemed to be effective in Bangladesh this will be highly significant; it will show that the techniques are widely applicable and can be used in both Africa and Asia.

Who are the intended users of this research?

The outcomes of this research will be of particular relevance to Bangladeshi policy-makers, practitioners, researchers and government officials as its findings will have implications for the reduction of morbidity and mortality associated with weaning food-related diarrhoea in Bangladesh. Moreover, because this project replicates an intervention study in Mali, it will be of relevance for policy-makers, practitioners and researchers operating at the global level. As the research will explore the interaction between hygiene and food it will be of particular interest for researchers investigating the growing subject of the interactions between WASH interventions and nutrition. A summary of the research findings will be made publicly available on the SHARE website and will be disseminated within the SHARE consortium and to a broad range of users.

