

## ACTIVITIES AND ACHIEVEMENTS QUESTIONNAIRE

### 1. Non-Technical Summary

A 1000 word (maximum) summary of the main research results, in non-technical language, should be provided below. The summary might be used by ESRC to publicise the research. It should cover the aims and objectives of the project, main research results and significant academic achievements, dissemination activities and potential or actual impacts on policy and practice and highlight where the project has been successful in building capacity.

This project assessed how health influences vulnerability to major disaster events.

The project contributes to a goal of poverty and disaster risk reduction through improved health security. The following overall research objectives were developed for this initial two year project centred on the case of Bangladesh to:

- Identify how health security influences vulnerability and resilience to disasters.
- Assess how health security monitoring can facilitate early warning and preparedness against changing thresholds of disaster risk.
- Evaluate which approaches to health security enable people to monitor resilience as an aid to mitigating the impact of disaster events.

The project found that it was not possible to identify the meaning of health security for disaster resilience in Bangladesh using the secondary macro scale health and disaster data gathered in the initial stages of the research. We found that wider health and disasters data, and seasonal patterns of health and disaster events contribute by broadly confirming the relationship with an annual climatic cycle. Flooding, cyclone events, and to some extent drought are associated with increased risk of infectious disease, particularly diarrhoeal diseases. However, this association between diarrhoeal disease and broad based environmental fluctuations is not new information in Bangladesh, rather the expected norm. Our attention therefore progressed to the need to understand the meaning of health security for disaster resilience at the local level, based on local people's perspectives. This is because, whilst background trends in climate and health are important, research, policy makers and practitioners need to address health security as part of proactive disaster risk reduction capacity at the personal and community level. We have noted that people's engagement with improving health and reducing disaster impact depends on their being able to assess and manage locally established resilience and coping. Finding out about this required engaging in focus group activities, extended interviews, household monitoring, and a 623 household questionnaire survey in three regions of Bangladesh. Three sites were selected; in the southern cyclone belt at Chakaria, in the central flood zone of Matlab, and in the extreme poverty affected northern drought prone area of Nilphamari. Multiple data and documentation has been acquired. Research capacity was strengthened throughout the process, and it is concluded that this has also been a significant additional benefit of the ESRC – DFID programme.

The people's perspectives approach suggests that the meaning of health and health security are subjective, though understood and perceived by the rural people of these

areas in a meaningful way. Health security also possesses a class and gender dimension. The findings of this study suggest that security and health security are intrinsically linked and that health security is more than the lack of disease, illness and death. It suggests that individual security can be remote from the national human security discourse when addressing health. This therefore also suggests that some of the conceptualisation of health security at the wider international level can be divergent from local priorities. Health security in a vulnerability context suggests people's resilience to and agentic capabilities of coping and surviving recurrent shocks. In Bangladesh this is pertinent in relation to floods, cyclones or inflation. Survivors of disasters have been strong in that they turn to their own knowledge and capacity to mitigate disaster impacts. The more general findings are that a local perspective of health security is process oriented, people centred, dynamic and context specific.

As the meaning of health security can change from one location to another, a grounded research provides the means to engaging with health security in terms of what it means to varied people, and its policy implications. We found that the research approach, along with surveillance systems (such as locally owned household monitoring), equity monitoring, and self care assessment can document health security processes in relation to disaster vulnerability and change in local adaptive capabilities. The academic, policy and practice implications are significant as we now know that health security monitoring helps facilitate early warning and preparedness against changing disaster risks. Building health security is likely to be one of the ways in which the impacts of climate change can be offset. If strengthened health offsets disaster impact, resourcing might be best channelled into building up health, as part of poverty reduction, rather than solely attempting to mitigate environmental hazards. Strengthened health based on local understanding of health security in Bangladesh should provide a way forward for development and disaster reduction intervention programmes. Instead of more exclusively focusing on the impact of disasters on health, and consequently relying heavily on disaster response, we should recognise the impact of health on disasters, as a call to invest in (health) disaster prevention.

The project has been engaging with policy makers over these findings, both in Bangladesh and internationally. Further details of dissemination of information to date are provided later in this report. The subjective element of health security can be challenging for policy makers. First, health security in a vulnerability context suggests achievement of basic needs, since more than 77 per cent of the population in Bangladesh still lack basic or minimally essential human capabilities and access to quality health care services at an affordable rate. Second, health security is also essentially about enhancing people's capability through investment in livelihoods, promoting regular employment and people's experimenting with diversification strategies. Third, people's perspectives from the field reinforce the issue of 'securitization' of human security. Securitization according to the Commission on Human Security involves budgetary prioritisation for health as a sector (Chen, 2004). However, the people's perspectives on health security suggest not only budgetary prioritisation in terms of health care facilities and economic activities to boost the rural economy; but also 'integrated, multi-hazard disaster risk reduction' as suggested by the Hyogo Framework for Action (UN, 2005). Without inclusion of assessment owned at the household level, it will be hard to tackle pervasive food and insecurity and increasing environmental disasters due to climate change. Health security includes people's opportunity to send children to school, access to credit and the ability to buy the most basic household assets to avoid consequent ill health.