

Nutritional Surveillance Project

Special Report:

May 2, 1994 Cyclone



SUMMARY:

The May 2, 1994 cyclone caused little loss of life but considerable property damage in Teknaf. This rapid post-cyclone survey does not demonstrate significant nutritional impacts on children 2 weeks after the cyclone as measured by MUAC. However, the loss of property and crops appears to be great and diarrhea point prevalence was 26%. Further assessments will determine the long term effects these losses will have on children's nutritional status in the area. This assessment does not cover the refugee population.

HKI

Helen Keller International
Dhaka, Bangladesh

Nutritional Surveillance Project

Special Report: May 1994 Cyclone

On May 2, 1994 a severe cyclone hit the southwest coast of Bangladesh. The cyclone prompted a level 10 warning and winds were clocked at between 150-165 miles per hour. Although potentially very deadly, the cyclone had a small radius and moved across a less populated area of the south. The thanas of Teknaf, Ukhia and Moheshkhali were most affected. Lives were also spared because of the lack of a storm surge; the storm hit when tides were low and the moon was waning.

Although the loss of lives was minimal, the damage to crops and housing structures was heavy. Prices of essential commodities quickly rose. Helen Keller International immediately mobilized four emergency teams to go to the affected area to collect data on how the cyclone had affected the residents of Teknaf. This assessment does not cover the population of refugee camps. The data collection was done between May 14-19, using the same methodology used in Helen Keller's Nutritional Surveillance Project (NSP) and the questionnaire was developed based on that used after the 1991 cyclone. A total of 318 households were surveyed and nutrition data was collected from 534 children 6-59 months old. HKI's special teams were trained in the specifics of the emergency questionnaire. Data entry, verification and analysis were performed at the HKI data facility. Of special interest was whether the nutritional status of children had been affected by the storm. As Teknaf is a thana that is already included in the NSP, baseline data was available from the area.

Nutritional Status

Mid upper arm circumference (MUAC) of the child was used as it is a quick and effective way to assess the child's nutritional status during times of distress. 10.7% of children had a MUAC <125 cm. This is slightly, but not significantly higher than what was found for the periods of February 1993 and 1994 and April 1993. Given that data collection took place within two weeks after the cyclone, it's not surprising to see little demonstrable nutritional impact. A large number of children were found to be suffering from diarrhea although Teknaf generally has high rates of reported diarrhea. Diarrhea point prevalence was found to be 26%, compared to a rate of 10% in February 1994.

Socio-Economic Status

None of the respondents reported any loss of life in their households which is consistent with the low loss of life reported by the Ministry of Disaster Management and Relief (Consolidated Daily Bulletin of 4/05/94). There was some loss of farm animals and considerable loss of boats. Although there were no reports of land loss, those who owned land for growing betel leaf reported significant destruction of both betel nut sheds and plants. 7% of households reported making distress sales because of the cyclone. Jewelry and livestock were the main items sold in distress.

A majority of the respondents were involved in some sort of agricultural business; with a majority being day laborers. Whether the loss of plants and agricultural commodities during the cyclone will translate into unemployment or new work opportunities during the rebuilding process remains to be seen. Fishing was the second most commonly

reported occupational category.

During the cyclone 64% of the respondents stayed in their own house. 20% left for a relative's house and 9% stayed in a cyclone shelter. 6% left for a local mosque or school (Table 1).

The cyclone caused considerable damage to the residents' houses. Whereas before the cyclone virtually 100% of the respondents lived in their own structure, post cyclone only 58% were able to stay in their house. Only 6% of those surveyed stated that the cyclone had not damaged their homes. Those who had not repaired/rebuilt their house at the time of data collection were staying with family and friends or had built a temporary family shelter. A majority of those had already started rebuilding their homes or had plans to start within the next two months. Most planned to use their own resources to rebuild (56%) whereas others were relying on loans from family and friends (15%) or from relief/aid (7%). A minority (13%) responded that they had no resources with which to rebuild their homes.

Considerably fewer respondents were using handpumps and more respondents were found to be drinking water from a pond/river than normally found in the Teknaf area, indicating there was some damage to regular drinking water sources. This is consistent with the high diarrhea point prevalence.

Per capita food intake post cyclone appears to have remained relatively consistent with previous findings for Teknaf. 50% of the families reported receiving some rice from aid. However, a majority of people's rice came from the market place. Weekly

Table 1. Socio-economic indicators

| <u>Shelter during cyclone</u> | <u>%</u> |
|-------------------------------------|----------|
| Own home | 63.5 |
| Cyclone shelter | 8.8 |
| School/Mosque | 5.7 |
| Hill top | .3 |
| Relative's house | 19.8 |
| Other | 1.8 |
| <u>Present family accommodation</u> | |
| None | .3 |
| Own house | 58.8 |
| Relatives/Friends | 3.5 |
| Temporary shelter | 37.4 |
| <u>Source of drinking water</u> | |
| Pond/River | 22.1 |
| Open ring well | 6.9 |
| Closed ring well | 5.3 |
| Hand pump | 60.6 |
| Other | 5.1 |

N = 318 households

per capita rice consumption was 3.21 kilograms. There was virtually no wheat eaten by any of the respondents within the previous week which is also consistent with previous findings from the area.

In summary, the May 2, 1994 cyclone caused little loss of life compared with previous cyclones in the area. Although children's nutritional status was not greatly affected within two weeks of the cyclone, the eventual toll that the loss of home and property will cause requires continued monitoring.

Collaborating Organizations

| | |
|---|-----------|
| Aga Khan Community Health Project | (AKCHP) |
| Bangladesh Rural Advancement Committee | (BRAC) |
| CONCERN | |
| Gono Unnayan Prochesta | (GUP) |
| International Center for Diarrhoeal Disease Research, Bangladesh | (ICDDR,B) |
| Institute of Public Health Nutrition | (IPHN) |
| PROSHIKA | |
| Rangpur Dinajpur Rural Services | (RDRS) |
| Society for Health Extension and Development | (SHED) |
| United Nations Children's Fund | (UNICEF) |
| Christian Commission for Development in Bangladesh | (CCDB) |

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