Survey Site: Jagatsinghpur District, Orissa, India
Focus of the study: Health impacts of the 2008 flood in Orissa

Background of the study
Floods are the most common reported natural disaster worldwide, with important impact on health of human populations. These effects are especially dramatic in developing countries of south and south-east Asia. Recent review has pointed out that there is little research on the association between floods and children’s nutritional health. VHAI conducted a survey in 2008 September flood affected Jagatsinghpur district of Orissa, India to study the prevalence of malnutrition in children living in exposed and non-exposed villages. In the first sampling stage 29 villages (30 clusters) were selected using Probability Proportionate to Size (PPS) methods. The lists of children aged 6-59 months were obtained and a random sample of 30 children was obtained in each cluster for a total of 900 children. 21 children were excluded as they were not available/died. The study was conducted in September 2009.

Summary Statistics

Non Exposed Areas
Figure 2. Prevalence of stunting (HFA) in non-affected areas (by gender)

Prevalence of stunting: All (415): (120) 28,9% (24,7-33,1 C.I.); Boys (219): (72) 32,9% (28,2-37,6 C.I.); Girls (196): (48) 24,5% (15,5-33,4 C.I.)

Exposed Areas
Figure 3. Prevalence of stunting (HFA) in affected areas (by gender)

Prevalence of stunting: All (409): (96) 23,5% (19,4-27,5 C.I.); Boys (216): (45) 20,8% (16,5-25,2 C.I.); Girls (193): (51) 26,4% (21,1-31,7 C.I.)

Results
- Wasting and underweight showed the largest differences in prevalence between affected and non-affected areas, whereas the prevalence of stunting (chronic malnutrition) presented quite similar results between affected and non-affected areas.
- A priori, no systematic or large differences in these indicators were evident between boys and girls in our sample.

N. B. All these results are not definitive and should be taken as indicative.

PRA exercise by women of Jagatsinghpur district showing geographical vulnerability and impact of disaster on their community.

Photo: VHAI MICRODIS Team

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