



VHAI SURVEY REPORT

About the site: Jagatsingpur district in Orissa, India is taken as the survey site by VHAI under MICRODIS. Jagatsinghpur is a district in coastal Orissa. It is geographically located between 20° 16' North Latitude and 86° 10' East Longitude and at an altitude 14 meters from sea level. It covers a geographical area of 1914.6 Sq. Km. with the forest area of 132.92 Sq. Km. For the convenience of administration the district is divided into one subdivision, four Tahasil and eight blocks. Jagatsinghpur district is well connected by road and railways. Devi, Mahanadi, Kathajodi and Biluakhai are the four main rivers that flow through the district. There are two main Canals in the district they are Taladanda and Machhagaon.

The total population of the district is 11,39,126 out of which 5,80,294 is male and 5,58,832 are female. The population in the rural area is 10,25,210 and in the urban area the population is limited to 1,13,916. The schedule caste population consists of 2,40,355 and the schedule tribe population is 9,113. The population density of the district is 662 per sq. k.m.

This district is often affected by tropical storm systems like cyclones as well as storm induced flooding and surges. Severe flooding caused by storm surges during the 1999 super cyclone caused massive damage to life and property. In the last decade 5 major disasters have affected the State severely. The district as well as blocks is disaster prone due to their geographic location. The entire geography of the district is coastal plain land with network of rivers and canals. The 5 survey blocks are closely located to the Bay of Bengal. In the last decade 5 major disasters have affected the district. The major disaster that occurred in the district in 1999 was a Super cyclone and a gas leakage in Paradeep Phosphet Ltd; in 2001 it was heavy flood; in 2005 another heavy flood; and in 2007 another major flood. In the year 2008 the flood was of very high intensity which caused massive devastation to a large number of population and affected



a larger geographic area. The vulnerability of the district as well as the blocks was clearly observed during the last Super cyclone and consecutive floods. People with lower income group and lower social strata are those who reside near the most vulnerable points of disaster. People living below poverty line, SC and ST population, women headed houses, physically challenged people, are the worst affected during a disaster. Pregnant women, elderly and children are also badly affected during the disasters. During recent flood in 2008 September, five blocks of the district were severely affected.

Process of Carrying out field work:

Literature Review: The State of Orissa suffered heavy loss of life and property during the super cyclone that hit the state in October 1999. Immediately after the rehabilitation phase, it was felt that there was a need to form an autonomous body to coordinate the relief and rehabilitation activities in the state. As a result, Orissa State Disaster Mitigation Authority (OSDMA) was set up by the Government of Orissa and was registered under the Societies Registration Act, 1860 on 29.12.1999. OSDMA has published many documents on disaster management in collaboration with UN agencies and many other International, National and local level organizations. Further report of many NGOs of working in Orissa in the field of disaster management is also available with OSDMA. VHAJ reviewed all these literatures.

Research Design: In order to establish empirical evidence and test the hypotheses as per MICRODIS conceptual model we have adopted exploratory research design and concurrently collected data both by qualitative and quantitative method. It look into the problem by exploring different literatures related to study and compiling views from different sets of respondents. It conducts experiment to the subjects by a set of interview schedule, with the hope to find answers to the research questions. This schedule will be administered among 757 respondents from test group and 816 from control group drawn from



sampling. In these entire respondent's family, below five years children will be measured to know the nutritional status. The study will also cover 42 health institutions with a structured questionnaire to assess the institutional delivery mechanism in a disaster situation.

The study also employ qualitative research methods like focus group discussion, key informant interview, social mapping and other PRA methods to find and build theories that will explain the relationship between variables through qualitative elements in research.

Pre testing of Questionnaire: A set of MICRODIS Core and Thematic Core questionnaires were tested among 45 families in 1st week of November 2008. Out of 45 families 21 respondents were female and 24 respondents were male. There were 11 interviewers those who have under gone one-day orientation cum interaction programmes before conducting the survey in the field. On the basis of feedback from the enumerators the questionnaire was reviewed and edited.

Training of the enumerators: The orientation workshop for the interviewers and the supervisors were organized from 3rd to 5th November 2008. The training was organized in a community center of VHAI in one of the survey villages. On the 1st day of training we discussed the objectives of the programme and basics of household surveys. The participants are divided into groups and started discussing the questionnaire. Each participant started asking questions again and again to his co-participants. The 2nd day forenoon session was devoted for discussing health questionnaire, nutritional status survey and anthropometrical measurement. In the afternoon session the discussion was on sampling, selection of household and management of qualitative data. During third day the discussions were on different PRA methods. Then the participants are divided in to groups and given responsibility of different villages. In the afternoon the participants visited to the village and started filling up of some dummy questionnaires. Demonstration of anthropometrics measurement was also



organized at the community level. The training was attended by Prof. P.C. Joshi, Microdis Asia Coordinator, Ms. Meeta Mathur, Nutrition Expert, Mr. Bigyan Mohanty, Statistical Officer, Government of Orissa, Prof. S.P. Das, Xavier Institute of Management, Dr. Madhuri Singh, Medical officer among others as resource persons.

Total 14 interviewers, three supervisors, one data entry operator and the survey coordinator attended the training.

Sampling: We adopted the Probability Proportion to Size (PPS) method to draw the sample. It is a sampling technique commonly used in multi cluster sampling, in which the probability that a particular sampling unit will be selected in the sample is proportional to known variables. We have adopted this method to reduce standard error, bias and avoid weighting.

Survey implementation: After initial launching and training workshop the enumerators visited the selected villages and organized awareness programmes through large group discussion and meeting of opinion leaders and members of local Panchayatraj Institutions. Since our focus was on health and nutrition issues, so we had very focused discussions with the village health workers, ASHA and Anganwadi workers in the community. During this period a group of enumerators also started listing the families, numbering and selecting the household for survey. The local community had participated very actively in the process. After four days of this intensive awareness campaign and household identification we started the actual interview and anthropometrical measurement in the field.

Survey Experience: When the research was initiated the concerned community was consulted at the stages of progress. The community contributed their feedback in modification of the questions in the schedule and finalization of the same. They suggested discussed different methods of data collection and



suggested the most effective ones in their context for getting accurate data. In fact the community leaders and proactive members guided the research team to make the process more effective. VHAI's research team involved the government machinery both at Block and district level in the process thus by decreasing the gap between the government and the community. The PRI members were also an integrated part of the research. Thus it was a participative process for the community and community owned the research entirely.

The schedule was consisting of number of questions so as to obtain maximum information from the community and check and cross check its validity. Initially it was very difficult for the enumerators to understand the questions and their relevance. But by thorough practice, orientations, discussions and feedback sessions the enumerators could understand the schedule and its usability.

The Research Team of VHAI was spread over 5 different blocks and had list chance to discuss among each other on the questions or responses. But they had developed the practice of taking notes immediately wherever they used to have doubts. Every evening the team used to meet and they were sharing these notes in the feed back sessions. Thus all were learning about how people look at these questions differently and thus come out with different responses. In this process many common strategies were also developed to deal with critical questions. This process was also helping in triangulating the data and information collected.

The team has always focused on accuracy of the data. Thus more time is taken on each schedule and detailed information is sought. The enumerators also raised the issues where they have doubts in the FGDs and other formal and informal discussion. Secondary data is also used as a source for triangulation of data. As quantitative and qualitative study were undertaken simultaneously the data received from each source were supplementing each other.



Community was a tremendous source of learning. The team learnt the importance of community cohesiveness, ranking of social capital, methods adopted for community coping mechanism and indigenous knowledge on disaster management Learnt from the community.

Challenges : The study was a two months long process. Thus it was difficult to keep the motivation of the enumerators high. However the the team worked hard and shared their learning and enjoyed the process of the reseach as far as possible.

As the study was done in the disaster affected areas as well as the unaffected areas accessibility and transport was a problem. Remoteness of the area, lack of transport facilities, bad road condition were the major constraint in the research.

While conducting the study it was found that there are many social taboos and beliefs which were major hindrance. For instance there is a belief that by measuring weight children lose weight. In most of the communities men come to front when a community discussion is held and women's voice are not heard.

Preliminary observations: Community does not perceive social, health and economic impact differently. So VHAI analysed the data collected in an integrated manner. All the respondents faced multiple disasters in the last decade. 85% respondents informed that flood was very severe and their occupation were affected to a great extent. 33% people were displaced due to this flood.

While responding to the warning it was observed that 733 respondents received the warning out of them 701 got clear message. Only 485 have taken certain preventive action before disaster. This clearly shows that people have a casual approach towards the warning and did not take adequate action.



A detailed analysis of the responses of the respondents on level of satisfaction towards the support received it was observed that when 50% of respondents were somewhat satisfied with material and service support only 5% respondents were satisfied with financial support.

People had different levels of coping mechanism to face disasters. 48% of respondents have informed that the disaster was very traumatic and it was difficult to cope with the situation. Out of 758 respondents 581 informed that availability of food was not adequate. They used to skip the meals and went for cheaper options. 133 respondents have taken loan from different sources to cope with the situation and most of them taken loan from the self help groups.

Respondents mentioned that they have spent five times more on health after the disaster. Water and sanitation condition was not good before disaster it became even worse after the disaster. 71% does not have a toilet. 455 people were suffering from Malaria, 855 from diarrhoea and 1053 with fever which was observed from the information of health camps organized after the disaster.
