Integrated Health, Social and Economic Impacts of Extreme Events:
Evidence, Methods and Tools

Integrated Project

Sub-Priority 6.3: Sustainable development, Global Change and Ecosystems

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Report of the MICRODIS survey in Bahraich, Uttar Pradesh, India
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This report is the outcome of a field study conducted in Bahraich district of Uttar Pradesh, India. The aim of the field study is to learn about the integrated health, social and economic impacts of floods on the people. There were in all eight gram panchayats, four affected and four non-affected selected for the study. The study made use of both qualitative and quantitative methods of data collection. For collecting the quantitative data, an integrated questionnaire was used along with some secondary data that were collected from the district headquarters. The qualitative data was collected with the help of conducting focused group discussions, key informant interviews, PRA tools and disaster narratives.

The whole field study was conducted in fifteen days times with the help of seventeen enumerators who were responsible for administering the questionnaire. There were six focused group discussions conducted among the NGOs, medical officers, village headmen, village men, marginalized women and upper caste women. Six key informant interviews were also taken with the chief medical officer, project officer UNDP, NGO representative, additional development officer, sub-divisional magistrate and the sub-district officer (tehsildar). PRA tools were administered to know about the intensity of floods in the past five years. Disaster narratives were taken by conducting an essay writing competition among boys and girls of a senior secondary school.
The MICRODIS field study for the flood affected Bahraich district of Uttar Pradesh was scheduled to be completed in fifteen days time beginning from October 1, 2008 to October 15, 2008. The data was collected using both qualitative and quantitative methods. The field study was completed with the following targets:

1.) Administering 660 questionnaires among the flood affected and non-flood affected villages of the district (330 each).

2.) Conducting six Focused Group Discussions.

3.) Conducting six Key Informant Interviews

4.) Taking the Disaster Narratives from school children.

5.) Photographic and Video graphic documentation.

6.) Collecting the district level official data on floods and its impacts.

**Getting Started/Training of the enumerators** - the field study was started on October 1, 2008 with the training of the enumerators. It was a two days training program which started with the introduction of MICRODIS project, its aim and its expectations. There were practical issues like introducing oneself to the villagers, telling the villagers or the respondents about the aims of the project and the exercise of filling the questionnaire, the usefulness of their participation in the study, avoiding false claims of providing the villagers with some material help and being sensitive to the respondents responses and their time on which the enumerators were briefed.
The training session

The next round of training focused on telling the enumerators that how they are going to fill the responses in the questionnaire sheet. This was followed by a discussion on the individual questions where each and every question was spelled out aloud with the aim of telling them that how they are going to ask these questions to the respondents, what is the meaning of each question and what were the difficulties faced during the piloting of the questionnaire. The enumerators were asked to clear any doubts regarding each question.

This discussion was followed by a session where enumerators were asked to administer the questionnaire among themselves, one became the respondent and the other became the interviewer. This task was monitored by the UoD team and doubts were cleared regarding each question, if they had any. The enumerators were then advised to have a close look at the questionnaire before we meet again the next day.

Next day of the training was mainly divided into two parts- clearing of doubts regarding the questions and a test administration of the entire questionnaire by each enumerator. A nearby village named *Shek-Dahira* was selected for the preliminary test administration of the questionnaire. This exercise was done to make them more familiar with various questions and the way they have to be asked. This made them ready for finally administering the questionnaire on the sample.
Test administration in Shekh-Dahira village

To ensure that the enumerators are sincere and loyal in filling the questionnaire, back checking of the questionnaires were done by going to the same household again and enquiring the truthfulness of the questionnaire being filled. This kind of back checking was also conveyed to the enumerators so that they may abstain from forging the questionnaire.

Sample - the technique of random sampling was used to draw the sample out of the total population of the people in eight villages-four affected and four non-affected villages. A list of all the houses in these eight villages was obtained according to the name of the head of the household and was sent to CRED for selecting the households through simple random method for the survey. A random list generated by CRED was used as the sample.

Everyday before going to the field, enumerators were given the names of the household head where they had to go for conducting the survey. If by chance the person or the entire family has migrated to some other place then the name of the next person on the random list was taken, therefore some extra names were added to the CRED list by using the Tippet’s random sample table. This ensured that we complete the target of 660 households in all to avoid any kind of error that may arise later regarding the filling up of the questionnaire.

Focused Group Discussion, PRA tool and Key Informant Interview - there were six focused group discussions conducted among the NGOs, medical officers, village
headmen, village men, marginalized women and upper caste women. This cross section of people was taken to get a holistic view of the impacts of floods. There were some common questions that were framed to be asked in all the FGDs pertaining to the common definition of floods according to the people of Bahraich, what are the problems people face during the floods and how do they tackle these problems, what is the role of district administration and how far it is successful in providing relief to the people. Then there were specific questions that were put forward for discussion in the group like role of NGOs in pre-flood preparation and mitigation, their coordination with the district administration and other NGOs in the district, their coordination with the people. Questions pertaining to the type of diseases that are prevalent during and after the floods, how the medical department tackles with the problem and how far are they successful, were used in the FGD with the medical doctors. Then there were issues of coordination between the village headmen and the district and also with the villagers, what kind of problems these headmen face during and after the floods and how do they tackle them in favour of the villagers, which were discussed among the FGD with village headmen. There were other issues pertaining to the special problem of women in floods that were discussed separately while conducting the FGD with village women. All the FGDs were video recorded. It was made sure that there are 6 to 8 people in each FGD although it could not happen with the village headmen as only 4 of them turned up, but then also the FGD was conducted and some useful insight could be gained through them about the flood situation and impact.
An impromptu was taken with the villagers after the FGD on the way when they were dropped back home. Whatever they discussed after the FGD was recorded and sometimes a dialogue was generated with them to enquire about some issues in depth.

Before starting the FGD with the men and women of the village a PRA (Participatory Rural Appraisal) was conducted in which they were asked to arrange the beans on a chart paper along a line on which five slots were made indicating five years including the present year. FGD participants were asked to arrange the beans according to the intensity of floods this year and for four previous years with maximum beans kept on the slot depicting maximum floods and so on for all the years. This exercise had two advantages— it was used to gain correct knowledge about the flood intensity for five consecutive years and it helped in establishing good rapport with the participants before starting the FGD and made them comfortable with the surroundings, thus it was also a kind of warm up exercise.

![The PRA tool using beans.](image)

Another kind of PRA was conducted where the participants were asked to draw the course of the river in a map of the Fakharpur block, indicating the areas that are lying under the flood now and areas that are reclaimed after the flood water receded.
Areas under flood marked with the help of colored chalks.

Six key informant interviews were also taken with the chief medical officer, project officer UNDP, NGO representative, additional development officer, sub-divisional magistrate and the sub-district officer (*tehsildar*). These interviews were recorded on the tape recorder and later written verbatim in the local language first and then translated into English, the same was done with the FGDs which were video recorded and later written verbatim and translated.

**Disaster Narratives**- there were in all 80 narratives collected. This was made possible by conducting an essay writing competition among the secondary school students (40 girls and 40 boys) of a school where 80% of the students came from flood affected areas. They were given the topic of “Floods” on which they had to write about their own experience with recent floods in the given time of one hour. After they finished their copies were checked and out of them 6 best essays were selected (3 for girls and 3 for boys) and accordingly they were given prizes for their efforts on originality and content.

Boys and Girls writing essay.
Photographic and Video graphic documentation - the photographic and video graphic documentation combined together, occupies a space of 20GB on the hard disk, out of which 19GB is occupied by the videos and 1GB by the photographs.

Official Data - there were some official meetings done with the district magistrate, disaster management officials, with the sub-divisional magistrate, block development officer, additional development officer, chief medical officer and village head men in order to get hold of some official data related with flood post established in the district, damage of property like houses and land, relief material distributed in the affected areas, communicable diseases caused due to floods etc.