

Identification of win-win adaptation options through adaptation metrics and integrated adaptation decision-making frameworks

Executive summary

The main objective of this project was to develop a methodology for measuring the effectiveness of adaptation in agriculture and water sector through adaptation metrics which is applicable at a local level. For this purpose, the Global adaptation Index was adopted. However, as this methodology is applicable at a macro scale, so there was a need to identify additional indicators which represent the local conditions. Thus, a set of additional local indicators for testing the effectiveness of adaptation options were identified and developed. The activities of this phase were essentially centred on getting these additional indicators reviewed by different stakeholders including the researchers, government officials as well as the local communities. To fulfill these objectives, a stakeholder consultation was carried out with researchers and government officials from different disciplines including agriculture, water, drought management and climate change adaptation. A suitable site meeting the criteria of the project was selected and pilot testing of the questionnaire was done with local communities in this site. An interaction with the district officials in the relevant departments was also done to understand the local scenario. The results of these exercises will help to formulate a final methodology for adaptation metrics which can be applied at a micro scale and used to test the effectiveness of adaptation options. The methodology will be used for actual surveys with the researchers and communities in the next phase.

Key lessons from the pilot survey done with farmers using the questionnaire

- The questionnaire in its present form is too technical and difficult to communicate to the rural farmers and communities. There is a need for the questionnaire to be converted into a simpler form to effectively communicate the objectives of the discussion.
- The questionnaire should be discussed in a general consultation mode with the communities rather than individual interviews. This is because it is an opinion-based assessment and the opinion of the farmers in a village is almost similar with only minor differences. Getting consensus within the group regarding rankings is better than taking averages of individual responses which are more or less similar.
- In the case of getting responses from specific target groups, only relevant questions and indicators should be put forward to the groups. For example, the complete questionnaire in its present form cannot be used for women. There are only a few points which are relevant for them.
- For each type of adaptation options, there are several indicators and this makes the process complicated and difficult to understand and accordingly rank. It would be good to limit the number of indicators within each category to not more than 5. Maybe, the number of indicators can be reduced by removing overlapping and irrelevant indicators. Also, in some cases, the indicators can be split into two subcategories within the larger categories.
- The pilot survey showed that the farmers do not change their opinions with respect to different practices. Their priorities to monitor effectiveness remain the same across different practices within a sector (water or agriculture). For example, if their priority is increase in freshwater availability, then whatever may be the practice, they will judge its effectiveness with respect to water availability.
- The criteria of ranking the indicators need to be reduced in number and simplified. Some of these are difficult to communicate to the farmers.