

Memorandum of Understanding
Between the
Bangladesh Bureau of Statistics

and the
International Food Policy Research Institute

Background

The International Food Policy Research Institute (IFPRI) is partnering with BRAC and the University of Oxford to learn about whether and how an agricultural insurance program could be designed for farmers across Bangladesh. The joint BRAC –IFPRI –Oxford research project focuses on tenant farmers in BRAC's Borga Chashi Unnayan Program in Bogra and Manikganj.

The research is focused on designing good indexes to insure risks that are of concern to farmers in a given area, but complementing this insurance with other forms of insurance that rely on local information and knowledge. The research agenda includes basic questions on appropriate indexes for Bangladesh. What should the index be? How close would this index be correlated with farmers' actual crop losses? Are weather indices accurate? Are area yield indices accurate, taking into account different soil types and new seed varieties, and could claim payments from area yield index insurance be timely?

Initial research suggests that different types of index -rainfall, river height and area-yield -may be required for different locations. A census that was conducted in villages in 28 districts covered by BRAC's tenant farmers program showed that 63% of farmers lost more than one-fourth of their crop during the last five years. The main reasons for these losses were pests (19%) drought (17%) and flood (14%). However, the predominant risks were location-dependent.

Proposal for joint work

As part of this work that IFPRI is undertaking to better understand agricultural risk and insurance in Bangladesh. IFPRI would like to collaborate with the Bangladesh Bureau of Statistics. In particular, collaboration on the following activities is proposed:

1. Describe and characterize the geographic nature of paddy yield risk in Bangladesh over the last 30 Years. This activity would involve analyzing the nature of paddy yield risk in Bangladesh using historical BBS upazila production and area cultivation estimates. This analysis would look at whether poor yields in one year in one upazila are reflected in yields of neighboring upazilas in the same year.

2. Try to ascertain the relationship between the number of crop cutting experiments (CCEs) conducted within an upazila and the sampling error, the difference between the sample mean and true mean upazila yield.
3. Describe and characterize the risk profile types of paddy. It would use historical BBS yield estimates look at whether local seeds and high-yielding seeds show the same severity and frequency of loss.
4. Estimate a probability distribution for average paddy yields across a specific upazila in the next agricultural year.

The work would be done in collaboration between BBS staff and IFPRI researchers. A joint report would be written to publish the findings.

In order to complete this work a dataset of upazila yield estimates for selected upazilas in Bangladesh is required and analysis on this data set is needed. We propose the following allocation of tasks:

1. BBS would enter and construct a dataset of historical upazila yield estimates for selected upazilas in Bangladesh. (Ideally this dataset would include the upazilas of Bogra, Gabtali and Sherpur in Bogra zila and Manikganj, Singair and Saturia in Manikganj zila where fieldwork is ongoing as part of this research project. Ideally at least seven years of upazilaa level data would be available)
2. BBS would construct a database of yield from raw crop cutting experiments. This dataset would be treated as strictly confidential by IFPRI, and publication of any statistical analysis of this data would require explicit authorization by BBS. (Ideally this would include data for between two and five recent years, for the above upazilas)
3. IRPRI would work with BBS staff to analyze this dataset to describe and characterize paddy yield risk and estimate a probability distribution for future paddy yields.
4. IFPRI would draft a report to publish the analytical results.
5. BBS would comment on this report and finalize it in collaboration with IFPRI.
6. IFPRI will not distribute unpublished data to the third parties without permission of BBS.
7. For the purpose of future collaboration, IFPRI may consider inviting BBS staff to visit IFPRI- Bangladesh office and learn about IFPRI,s research activities.

8. IFPRI may consider contributing to the capacity building of BBS in future by providing BBS staff in trainings and workshops.
9. IFPRI may consider providing opportunity to involve BBS staff in research activities of IFPRI in the future.

In addition IFPRI would like to request that the Bangladesh Bureau of Statistics provide upazila yield estimates for the Boro 2012 and Aman 2012 seasons for the following upzailas as and when they become available: Bogra, Gabtali and Sherpur in Bogra zila and Manikganj, Singair and Sauria in Manikganj zila , This is for research work IFPRI is conducting with BRAC on the Feasibility of area-yield insurance.

Timeline:

- April 30,2012: Datasets of upazila yield estimates and raw CCE data constructed
- June 15,2012: Analysis completed
- July 30, 2012: Report Finalized
- June 30, 2012: Boro 2012 Paddy yield estimates for Bogra, Gabtali and Sherpur in Bogra zila and Manikganj, Singair and Sauria in Manikganj zila.
- December 31, 2012: Aman 2012 Paddy yield estimates for Bogra, Gabtali and Sherpur in Bogra zila and Manikganj, Singair and Sauria in Manikganj zila.
- June 30, 2013: Boro 2013 Paddy yield estimates for Bogra, Gabtali and Sherpur in Bogra zila and Manikganj, Singair and Sauria in Manikganj zila.

The duration of this MoU will come into effect on the date of the last signature to 31December, 2014 and would be extended for a period mutually agreed by both parties, unless either parties decides to rescind it in writing three months before the date of its expiration.

The parties may, by mutual consent in writing modify any provisions of this MoU. Any dispute between BBS and IFPRI arising out of the interpretation or execution of this MoU shall be settled by mutual agreement.

IFPRI will pay BBS an amount of US\$ 5,000.00 (Five thousand US dollars only) as compensation for BBS's collaboration 50% of which will be transferred to BBS on signing the contract and rest 50% amount will be given by December, 2014 to the Director General of BBS through a bank account.

In witness whereof the authorized representatives whose name are shown below have signed this MoU on behalf of their respective parties as of the day and year noted below.



Dr. Akhter Ahmed


Chief of Party

Bangladesh Policy Research and Strategy Support Program

International Food Policy Research Institute

Dhaka, Bangladesh

Date: 27/05/2012



27/5/2012.

Md. Shahjahan Ali Mollah

(Additional Secretary)

Director General

Bangladesh Bureau of Statistics

Date: