Instructions for FbF teams:

* Red text or [square brackets] indicate where the text of the template needs to be adapted to your country and programme/project context.
* In case you are also engaging the services of an external survey/research firm to carry out post-disaster data collection ([link to TOR](https://docs.google.com/document/d/1pVNtTjAKLE-dLnijpCMWvScSGJlrZTUOvqSWDDXqfgU/edit)), ensure that the TOR do not overlap but complement each other.
* Modify the title & content of the position according to the role that best complements (a) the statistical and research expertise in the FbF team and (b) the capacity of the [external research partner institution or survey firm](https://docs.google.com/document/d/1pVNtTjAKLE-dLnijpCMWvScSGJlrZTUOvqSWDDXqfgU/edit) that is tasked with carrying out the data collection.

**Terms of Reference**

**FbF programme/project statistician or research/survey expert (consultant)**

1. **Background and purpose**

Forecast-based Financing (FbF) is a funding modality and way of working whereby resources are released based on forecast information *before* a climate-related disaster happens, to implement planned activities which reduce risks, enhance preparedness and response, and make disaster risk management overall more effective.

In [name of country], [Name of FbF implementing agency] has worked with [name of collaborating organizations] to set up an FbF mechanism that delivers forecast-based actions to vulnerable and exposed communities before an anticipated disaster, specifically in the event of [list hazards, i.e. floods, cyclones, droughts, etc.]. Once a forecast reaches a certain probability threshold for an extreme event, forecast-based financing is automatically released and the early action protocol (EAP) is triggered which guides the implementation of early actions.

The purpose of this position is to provide technical expertise to the [FbF team] to assess the efficiency, effectiveness and impact of the FbF project against its objectives as stated in the programme/project logframe (see Annex).

1. **Scope of work**

The [FbF M&E Guide](http://goo.gl/eG7kw1) (web link: <http://goo.gl/eG7kw1>) provides general recommendations how to plan and implement an FbF impact assessment. The consultant is expected to be familiar with this general guidance and to develop and lead the practical implementation of the assessment approach.

The FbF impact assessment broadly follows a two-pronged approach:

1. Monitor the implementation of the EAP to ascertain whether actions have been implemented early and as planned;
2. Collect and analyze household-level data to assess whether the FbF project achieved a reduction in the effects of climate-related disasters on vulnerable communities.

The FbF team intends to use an experimental or quasi-experimental research design, with intervention and comparison groups. Therefore, it is essential that the consultant has in-depth expertise in these areas, including probabilistic sample design and data analysis using sample weights, and is able to develop a practical research approach, detailed methodology and suitable sampling frame.

1. **Specific tasks and deliverables**
2. [In case the consultant is brought on board from the very beginning of the project, otherwise remove:] Support the FbF team in developing a detailed project logframe and M&E plan that define indicators, data sources and practical means to collect data.
3. Review the indicators defined in the FbF project logframe and M&E plan and, where necessary, suggest modifications to ensure that data for all indicators can realistically be collected.
4. Develop a detailed research design to measure the result indicators as defined in the project logframe. The design must include:

* A practical approach to causal inference, preferably working with a counterfactual (intervention and comparison groups);
* The data collection methods to be used; a combination of quantitative and qualitative methods is preferred;
* Draft data collection tools (e.g. questionnaires), quantitative and qualitative, in consultation with the FbF team and partners;
* A mapping of all logframe indicators against the data collection tools, to ensure all logframe indicators are covered by the data collection tools
* [In case baseline data is missing, otherwise remove:] A plan for reconstructing baseline data, for example through historical secondary data or recall questions
* A detailed sampling frame with specifications for clusters and stratifications, sample size calculations for each component, and estimates of expected error margins and statistical power;
* A list of options for using electronic/mobile data collection and entry tools (such as ODK, KoboToolbox, Magpi etc.);
* An analysis plan that shows how the quantitative and qualitative data will be assessed vis-a-vis the project logframe, M&E plan and the project theory of change;
* A Gantt chart showing the consultant’s own work plan and reflecting the involvement and tasks of any other relevant individuals or organizations, including timelines.

[In case the FbF team engages an external research institution or survey firm, the following tasks may be assigned to the external institution/firm and the consultant may be put in a supervisory role:]

1. Oversee the translation, back-translation and pretesting of all data collection tools.
2. Select and train enumerators for data collection.
3. Develop and oversee the implementation of a fieldwork logistics plan to carry out the data collection.
4. Establish practical quality assurance mechanisms for the data collection phase and provide support to field supervisors while in the field.
5. Lead the analysis of the quantitative survey data, including

* Data cleaning
* Calculating and applying sample weights
* Estimating sampling errors
* Producing summary statistics and visualizations
* Identifying biases and their potential sources.

The analysis process must be reproducible and should therefore be recorded step-by-step, either by saving the syntax files of the statistical analysis software (R, Stata, SPSS, etc.), or by describing it in detail in an analysis protocol.

1. Lead the analysis of the qualitative data, including data cleaning, coding, and producing summary write-ups of key findings vis-a-vis the project logframe and theory of change. The analysis process must be reproducible and should therefore be recorded step-by-step, either by exporting the coding structure and excerpt statistics of the analysis software (Dedoose, etc.), or by describing it in detail in an analysis protocol.

All work must be original and follow the highest research and ethics standards.

1. **Reporting and work arrangements**

The consultant reports to [name of person / function] in [name of organization]. Bi-weekly progress reports against the consultant’s work plan must be submitted to the supervisor in writing (email). Payment and employment is subject to satisfactory performance and completion of all deliverables.

The consultant will work from his/her own location, with field visits to [name of country/region] for training or data collection as arranged by the FbF team.

All submissions will be made electronically (email, Skype, phone, etc.), unless requested otherwise by the FbF team.

1. **Duration of the consultancy**

The consultancy last for [# number] months. The approximate start date is [date].

1. **Required qualifications and experience**

* Graduate or advanced (PhD) degree in relevant disciplines such as statistics, demography, economics, sociology or related disciplines
* 5-8 years of experience in quantitative and qualitative research for impact assessment/evaluation
* Sound technical expertise in quantitative and qualitative methods
* Proven experience in developing and implementing experimental or quasi-experimental research designs (submit work samples together with application)
* Experience managing large datasets
* Knowledge of R, Stata, SPSS (or similar) and quantitative data analysis methods
* Knowledge of qualitative data analysis software (Dedoose, MaxQDA, or similar) and analysis methods
* Sound experience coding and analysing qualitative data
* Ideally, first-hand experience evaluating early warning/early action or similar initiatives in [name of country/region]
* Substantive knowledge of disaster risk reduction, vulnerability and exposure analysis, preferably in [name of country/region]
* Strong [language] report writing skills and a track record of producing high quality impact assessment presentations and/or reports.

1. **Application process and documents**

The deadline for applications is [date] at 23:59 hrs [timezone].

Interested applicants should submit the following documents electronically to [email address]:

* CV
* Letter of motivation
* List of publications and completed impact assessments, in tabular format
* Samples of previous work that show the expertise and experience of the consultant; samples must be the original work of the consultant

Incomplete applications or applications that are received late will not be considered. Only shortlisted candidates will be contacted.

1. **ANNEX**

[Include FbF programme/project logframe]