

# Impact Evaluation Research Assistant

## Terms of Reference

*October 2020*

### 1. Summary

The Development Impact Evaluation (DIME) department is looking for 1 research assistant to work on a portfolio of agriculture impact evaluation (IE) in Rwanda. Candidates hired through this process will be offered employment until June 2022, with the possibility of extension based on performance and project development. The consultants will be based in the Washington DC/remotely and work with the DIME and external researchers, on all phases of the study, from research design to analysis. The consultants' main responsibility will be to assure data quality through acquisition, processing and analysis, and to uphold DIME's standards of reproducibility and transparency. **Qualified candidates should apply using [this link](#) no later than October 12<sup>th</sup>, 2022 at 5 pm EST. Applications will be reviewed on a rolling basis.** Applicants may also indicate interest in being considered for positions that will open in the future.

### 2. Background and objectives

#### Development Impact Evaluation (DIME)

DIME generates high-quality and operationally relevant data and research to transform development policy, help reduce extreme poverty, and secure shared prosperity. It develops customized data and evidence ecosystems to produce actionable information and recommend specific policy pathways to maximize impact. Most DIME IEs are associated with a World Bank project. DIME works across the following World Bank sectors: Agriculture, Governance, Climate Change, Financial & Private Sector Development, Entertainment Education, Transport & Infrastructure, Social Protection & Jobs, and Fragility Conflict and Violence. DIME establishes a research team to work on each IE study through its completion.

Each research team typically includes a principal investigator and co-investigators, a field coordinator based in country to support the government team on all aspects of the IE, and one or more research assistants to support data cleaning, processing and analysis.

More information can be found at <http://www.worldbank.org/dime>.

#### Project details

DIME has a portfolio of impact evaluation with the Government of Rwanda and Ministry of Agriculture in Rwanda to support agricultural investments in the rural economy. An initial impact evaluation found relatively low use of hillside irrigation schemes by intended beneficiary farmers. In light of this finding, the national agricultural sector strategy emphasized the importance of optimizing the use of existing irrigation investments. This has led to the ongoing multiyear national research program studying inefficiencies

studying land and labor market frictions, and if improved market linkages and provision of water efficient technologies improves take up of irrigation and farmer productivity and income.

### 3. Tasks and Deliverables

The consultant will report to the project PIs and other members of the Impact Evaluation team.

Duties for RAs include, but are not limited to:

- Clean administrative and primary datasets and create all indicators required for analysis
- Write well-documented, reproducible code for data cleaning, descriptive statistics, regression analysis, data visualization, and any other analysis as per project needs; document all data work on the project's GitHub repository
- Manage databases, integrating various data sources (for example, project monitoring data, administrative data from local government, and household survey data). This may require programming matching algorithms, using spatial data to create linkages, performing manual matching, and linking up with field staff for additional information on specific tasks
- Support primary data collection: participate in questionnaire design; program electronic questionnaires, design and run high frequency quality checks on raw data; liaise with field staff to resolve data issues and required clarifications
- Conduct literature review and syntheses, contribute to impact evaluation reports and policy briefs, support the development of grant applications, and other writing and editing tasks
- Support receipt of ethical approvals and ensure that data security of identifiable information on project are maintained
- Prepare push-button replication files academic papers and related outputs
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- Deliver training courses like impact evaluation, data processing and analysis for government counterparts
- Participate in regular code review sessions with [DIME Analytics](#)

### 4. Skills Required

- *Academic specialization:* A Master's degree in economics, public policy, statistics, computer science or related field with strong quantitative research skills is essential
- *Technical skills:*
  - Advanced skills using either Stata or R for data processing and analysis is required
  - Experience with survey programming in an ODK based platform is strongly preferred
  - Experience with machine learning, natural language processing, Shiny dashboards, and geospatial analysis are desirable. Knowledge of python is an advantage (and required for certain positions)
  - Experience coding in a team environment and using GitHub is highly desirable. Knowledge about the relevant sectors is desirable
- *Experience:*
  - The candidate must have background in impact evaluation and econometric analysis

- Experience working with raw household survey data is required for most positions.
- Field experience working on impact evaluations, and/or managing data collection, is preferred
- Experience working in developing countries preferred and knowledge about the relevant sectors is desirable
- *Capacity Building Skills:* Demonstrated ability and experience in designing and delivering training and capacity building activities or other teaching experience is a plus
- *Language:*
  - Superior written and oral communications skills in English is essential.
- *Interpersonal skills:* Motivated self-starter, with demonstrated ability to work effectively and sensitively in teams, and excellent cross-cultural communication skills.

## 5. Intellectual Property

The World Bank shall, solely and exclusively, own all rights in and to any work created in connection with this agreement, including all data, documents, information, copyrights, patents, trademarks, trade secrets or other proprietary rights in and to the work. The consultant is not allowed to post or publish (electronically or in print) any project-related information without the explicit permission of the Impact Evaluation Team.

## 6. Terms

Research Assistants will be hired as a short-term consultant and remunerated according to the World Bank scale. Contract duration will be discussed on a project-by-project basis.

## 7. Selection Process

**Qualified candidates should apply no later than 5pm EST on October 12, 2022 using this [link](#)). Applications will be reviewed on a rolling basis.** Applicants will be asked to upload/share a zipped folder which include the following:

- Resume
- Brief statement(s) of interest (SOI). Candidates have the option to include a specific SOI for each position they are applying to. Each SOI should be no longer than 500 words, and the file title should clearly indicate the position of interest.
- Sample code. Applicants are recommended to include sample files prepared by them that best indicate their level of experience in Stata, R, Python, and/or ODK. Candidates may submit multiple code samples (no more than one per programming language), if relevant to their position(s) of interest. If you prefer to point to code on GitHub rather than attaching code samples, please share, as a readme file, the link to individual scripts that best represent your skills in the language. If full repositories are linked, the code will not be considered.

Shortlisted candidates might be invited to take a technical test based on the skills required by the hiring team and will be required to participate in interviews. **Only shortlisted candidates will be contacted.**

The World Bank Group is committed to achieving diversity in terms of gender, nationality, culture and educational background. Individuals with disabilities are equally encouraged to apply. All applications will be treated in the strictest confidence.