

**REPUBLIC OF GHANA**

**MINISTRY OF GENDER, CHILDREN AND SOCIAL PROTECTION  
GHANA PRODUCTIVE SAFETY NET PROJECT (GPSNP)**

**TERMS OF REFERENCE FOR THE POSITION OF SOFTWARE DEVELOPER-SPD**

**PP REF. NO. GH-MOGCSP-171456-CS-INDV**

**Project ID: P164603**

**Project ID: 6337-GH**

**I. BACKGROUND**

Ghana has experienced rapid economic growth over the past several years resulting in substantial progress in reducing income poverty. Gross domestic product (GDP) growth rose from 8.0 percent in 2010 to close to 14.5 percent in 2011, making Ghana's economy one of the fastest growing on the continent. By 2012, gross national income (GNI) per capita reached US\$1,940, reflecting Ghana's middle-income status. Poverty has been declining steadily, as reflected in the number of people classified as poor, which dropped from slightly over 50 percent of the population (about 8.0 million) in 1992 to less than 30 percent in 2006 (6.3 million).

However, recent macroeconomic instability is putting at risk the gains in poverty reduction. The fiscal deficit reached 12 percent of GDP in 2012 and 10.9 percent in 2013, and the current account deficit reached 13 percent of GDP in both years. The government tackled the fiscal imbalances by removing fuel subsidies and raising electricity and water tariffs, by around 60 percent in late 2013. The inflationary impact of the adjustment was exacerbated by a depreciation of the Ghana cedi (GHc). The higher prices implied a lower income in real terms, which imparted the risk of pushing many near-poor families into poverty. In fact, macroeconomic challenges disproportionately affect the poor members of the society. Thus, social protection initiatives are likely to mitigate the impact of the adverse effects on the poor.

Several social protection-related studies, undertaken in Ghana, have indicated that most social protection interventions are poorly coordinated and fragmented. For example, several social protection programs in Ghana have no systematic, computerized registry of beneficiaries, which means that no government agency has access to comprehensive data on the actual coverage of social interventions and very few programs have a computerized registry of beneficiaries. While the existing registries contain basic demographic information concerning personal identity, age, and sex, they have no socioeconomic data on their beneficiaries; this makes the process of monitoring and identifying potential beneficiaries difficult. Furthermore, most targeting mechanisms are not clearly defined, and beneficiary registries are not integrated, which limits centralized monitoring and strategic planning of social programs.

The Ministry of Gender, Children and Social Protection (MoGCSP) as the institution responsible for coordinating the implementation of the country's social protection system has established the Ghana National Household Registry (GNHR), as a tool to assist social protection programs to identify, prioritize, and select households living in vulnerable conditions to ensure that different social programs effectively reach their target populations across programs. More recently, the Government has introduced reforms and innovations to strengthen the transparency and objectivity of social protection delivery. Central to these reforms has been the launch of the Ghana National Household Registry (GNHR), which collects data on households to enable their selection into a range of targeted programs through an objective and transparent process

## **II. OBJECTIVE OF ASSIGNMENT**

The Software Developer-SPD will be responsible for developing the information system modules by designing, developing, and installing software solutions/ product deliverables in accordance with user specifications and with good practices in coding/software development. The Software Developer will also escalate technical design or specification issues to the MIS Specialist. S/he will also troubleshoot technical issues and identify modifications needed in existing applications to meet changing user requirements and analyze databases and identify data integrity issues with existing and proposed systems and implement solutions.

## **III. SCOPE OF THE ASSIGNMENT**

Specifically, the Software Developer-SPD is expected to:

- Collaborating with management and users and all stakeholders to identify end-user requirements and specifications
- Designing algorithms and flowcharts to create new software programs and systems
- Producing efficient and elegant code based on requirements
- Testing and deploying programs and applications
- Troubleshooting, debugging, maintaining, and improving existing software
- Compiling and assessing user feedback to improve software performance
- Observing user feedback to recommend improvements to existing software products
- Developing technical documentation to guide future software development projects
- Perform all necessary software maintenance, including coding, testing, debugging, upgrading and modifications of software requested by the management.
- Work closely with all MIS Specialist and other team members in the MIS unit alongside external consultants to deliver cutting edge solutions.
- Preparation of training manuals for users

## **IV. EXPECTED OUTPUTS (DELIVERABLES)**

- Inception report.
- Monthly Reports
- Quarterly Reports
- Final Report

## **V. REQUIRED QUALIFICATIONS AND EXPERIENCE**

The Software Developer-SPD should have the following minimum qualifications:

- At least a first degree in Computer Science, Software Engineering or Electrical Engineering (or equally relevant subject).
- Must be a full-stack developer and understand concepts of software engineering.
- At least 5 years' experience working on a variety of software development projects.
- Proficiency in popular coding languages including, PHP, Java, Android and .NET and frameworks or systems such as Laravel, NodeJS and Git.

- Demonstrated experience in database technologies (MySQL, SQL Server), and development of Restful Interfaces and APIs
- Demonstrated experience in development of online/offline data collection tools
- Experience with Agile and Scrum development methodologies
- Any other duties that may be assigned from time to time

## **VI: REPORTING ARRANGEMENTS**

The Software Developer, SPD will work within a team comprising the Network Administrator, Database Administrator and Statistical Officer/Data Analyst. S/he will however report directly to the MIS Specialist, SP.

## **VII. DURATION OF THE ASSIGNMENT**

The assignment shall be initially for a period of twelve (12) months from the date of contract signature. The contract may be renewed subject to continue need for the services and availability of funds. The assignment is expected to commence in November 2020

## **VIII. FACILITIES TO BE PROVIDED BY CLIENT**

The Client Employer) shall provide the following facilities to the Consultant. These include:

1. Office space;
2. Office logistics

## **IX: PLACE OF WORK**

The place of work is at the Ministry of Gender, Children and Social Protection, Ghana National Household Registry, Accra Ghana

NB: The shortlisted applicants will be subjected to oral interviews and practical tests prior to contract negotiations.