



GIS Risk Analyst Consultant (6 months)

The World Food Programme (WFP) is the world's largest humanitarian agency, fighting hunger worldwide. We are currently seeking a GIS Risk Analyst in the Emergency Preparedness and Response Coordination Branch (OPEP) in our headquarters in Rome, Italy. The opening is for a period of six months with a possibility of extension. Candidates should be available to start as of 01 June 2014, or sooner.

OPEP is responsible for enhancing WFP's preparedness and response capacity in emergencies, including early warning, preparedness planning, crisis support and information management. The Branch provides normative guidance, technical support and capacity building to field offices and regional bureaux, as well as inter-agency coordination.

Analysis and early warning for natural, economic and political risks is an important part of preparedness, and building WFP's early warning capacity is a strategic priority for OPEP. Toward this end the Branch has established the Analysis and Early Warning Unit (AEW) to support the WFP Emergency Preparedness and Response Package (EPRP), WFP's resource allocation, and other business processes through analysis and anticipation. To fulfil these responsibilities the AEW collaborates with OPEP units, WFP's Vulnerability Assessment and Mapping Branch, WFP's Field Security Analytical Unit, other humanitarian agencies – in particular through the Inter-Agency Standing Committee's Task Team for Preparedness and Resilience (IASC TTPR) – and partners in academic and research institutions.

OPEP's Geospatial Information Support (GIS) unit manages georeferenced data to ensure that WFP is prepared to meet new challenges and deliver humanitarian assistance in the most effective way possible. In recent years, GIS has undertaken an important collaboration with WFP's Programme Design unit, providing multivariate hazard analysis information and support to comprehensive overlays of causal factors related to risks, and trends of shocks, in a number of countries. This has contributed to significant progress in programme response and to strengthening the case for WFP food assistance that builds resilience in specific areas affected by recurrent crisis. Programme Design's increasing support to countries is creating an increased demand for multivariate hazard analysis information that feeds into a robust programme of context and risk analysis.

OPEP AEW and GIS, in collaboration with other relevant units in WFP, are developing a Spatial Contextual Risk Analysis Model (SCRAM) to support emergency preparedness and programme planning. To support emergency preparedness and early warning SCRAM will combine data layers covering hazard exposure and population vulnerability along with a modelling component to determine baseline probabilistic levels of humanitarian impact associated with particular hazard types, on a monthly basis, at a sub-national level, around the globe. To support programme design it will identify subnational areas with varying degrees of exposure to natural shocks, and population vulnerability, on a monthly/seasonal level.

Responsibilities

The GIS Risk Analyst will report to the SCRAM Project Coordinator (AEW Head of Unit) for the following:

1. Create the spatial historical frequency layers for the selected natural hazards (droughts, floods, landslides and tropical storms) necessary for developing the Spatial Contextual Risk Analysis Model and the Integrated Context Analysis (ICA).
 - a. Develop links with other units in WFP and partnerships with other academic and UN GIS experts to promote coordination and information sharing between organizations.
 - b. Collect, clean, standardize and prepare the hazard the spatial layers at the highest resolution as possible (either raster or vector format) and represent them as frequencies.
 - c. Analyse trends for each of natural hazards.
 - d. Compare results with EM-DAT data.
2. Conduct GIS elements of Integrated Context Analysis (ICA) in WFP
 - a. Combine historical trends of disasters as well as analysis of environmental degradation to ascertain areas that are most likely to experience the greatest negative impacts from natural shocks.
 - b. Overlay the information above onto household food security information and livelihood data.
 - c. Map outcomes to show accessibility of markets via the transport network as well as the main settlements affected by recurrent shocks.
 - d. Include seasonality in these analyses to inform specific interventions.
3. Support the institutionalization and standardization of the Integrated Context Analysis within WFP.
 - a. Support the preparation of guidelines and identify the steps of the Integrated Context Analysis that can be automated and transformed into tools.
 - b. Automate ICA processes using ArcPy for as many steps as possible.
4. Capacity building for ICA processes
 - a. Prepare guidelines for the ICA based on GIS Spatial analysis and remote sensing technologies to deliver training courses to local national disaster managers, WFP Country Offices and Regional Bureaux.
5. Missions to support Country Offices

Qualifications

1. Advanced degree in Geographic Information Systems;
2. Minimum 5 years of experience in GIS risk analysis.
3. Advanced risk analysis skills
4. Advanced GIS spatial analysis skills;
5. Familiarity with spatial databases;
6. Advanced development skills (Arcpy) is mandatory;
7. Fluent English research, analysis and writing skills; capacity to read and analyse reports in French is an advantage;
8. Experience in international scientific working environments.
9. Advanced editing on vectors using topology rules
10. Knowledge of the main GIS/Remote Sensing software: ERDAS, ENVI ArcGIS 10; QuantumGIS and other open source software knowledge is an asset.

Terms and Conditions

WFP offers a competitive compensation package which will be determined by the contract type and selected candidate's qualifications and experience.

Please visit the following websites for detailed information on working with WFP.

<http://www.wfp.org> Click on: "Where we work" and "Our work" to learn more about WFP's operations.

<http://www.unstaffmobility.org> Learn more about countries where the UN operates.

Application procedures:

Go to: <http://i-recruitment.wfp.org/vacancies/14-0015041>

Step 1: Create your online CV.

Step 2: Click on "Description" to read the position requirements and "Apply" to submit your application.

NOTE: You must complete Step 2 in order for your application to be considered for this vacancy.

Deadline for applications: 30 April 2014

WFP has zero tolerance for discrimination and does not discriminate on the basis of HIV/AIDS status. Qualified female applicants and qualified applicants from developing countries are encouraged to apply.

REF: 14-0015041

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