Risk Data Fellows (2nd edition)

Short Term Consultant (STC)

- **Job Title:** Risk Data Fellow
- **Unit:** Global Unit for Disaster and Climate Risk Management
- **Location:** Remote location with mission travel
- **Days:** 75 (with possibility of an extension)
- **Start Date:** November 2025
- **Language:** English

The Risk Data Fellows program is a 6-month work placement for climate and disaster risk professionals (data scientists, geospatial analysts, and similar) from selected climate-vulnerable countries, offering the opportunity to work directly with World Bank Operations to access, create, and communicate climate risk knowledge to their communities.

The Fellowship program aims to bridge the knowledge gap on disaster and climate risk by empowering vulnerable countries with the necessary tools, methodologies, and support to generate and communicate their disaster and climate risk data.

After a successful first cohort of Risk Data Fellows, the Digital Earth Team, in partnership with the Disaster-FCV Nexus, is launching the recruitment of the second cohort of risk data fellows, this time focusing on Fragile and Conflict-affected Situations (FCV countries).

Global Unit for Disaster and Climate Risk Management

The Risk Data Fellowship program will be led by the Digital Earth team within the Global Unit for Disaster and Climate Risk Management at the World Bank, with funding provided by the Swiss Re Foundation. The Digital Earth team aims to enhance the resilience of vulnerable countries and communities to climate change and natural hazard disasters through greater access to and adoption of frontier earth observation tools & services. The Global Unit for Disaster and Climate Risk Management oversees the Global Facility for Disaster Reduction and Recovery (GFDRR), which offers grants and technical assistance for disaster risk reduction and climate change adaptation.

Risk Data Fellows

The fellowship program will offer an initial 6-month (75-day) placement to work at the nexus of data science and disaster risk management on selected World Bank projects in climate-vulnerable countries.

For this second cohort, fellows should be nationals or residents of the following FCV countries:

- Burkina Faso
- Burundi
- Cameroon
- Chad
- Comoros
- Congo, Democratic Republic of
- Congo, Republic of
- Ethiopia
- Guinea-Bissau
- Iraq
- Kosovo
- Lebanon
- Mali
- Mozambique
- Niger
- Nigeria
- Somalia
- South Sudan
- Sudan
- Syrian Arab Republic
- São Tomé and Príncipe

During their placement, fellows will work as World Bank Short-Term Consultants (STC). They will apply their data science skills to World Bank Advice and Analytics, or Financing activities. The expected outcomes are increased availability, dissemination, and use of climate risk knowledge in climate-vulnerable cities and countries.

Fellows will be selected based on their data skills, climate and disaster risk skills, and willingness to support their communities. They will receive training and hands-on support throughout the project to learn about World Bank activities and innovative technologies in their domain and contribute to improving climate risk analysis.

Duties and Responsibilities

Scope of Work

- The Risk Data Fellows will support World Bank Project Task Teams in better integrating disaster and climate risk data into their Advisory and Analytics, and/or Financing activities.
- Fellows will provide support tailored to each project's specific needs. This support will align with one or more of the following thematic roles:
  - Data readiness & advisory,
  - Risk data analytics,
  - Risk data communication,
  - Machine learning,
  - Earth observation,
  - Risk data sharing.

- Please refer to the Annex for more details about each of the risk data activities.
- Fellows will receive mentoring from the Digital Earth team and work under the remote supervision of Pierre Chrzanowski, Disaster Risk Management Specialist, and supporting members of the Digital Earth partnership team. They will also report to and support the Project Task Team.

Number of days

The initial contract will be for 75 days, from November 2025 to April 2026.

Selection Criteria

Critical qualifications required for this assignment include the following:

- Master's, Ph.D., (or current graduate student at M.A. or Ph.D level) in the fields of climate change, disaster risk management, geospatial technologies, computer science, or other relevant fields
- Experience working with digital technologies for disaster risk management, including digital platforms, data, models, and standards.
- Demonstrated data science or geospatial analytics knowledge and skills.
- Proven ability to carry out independent policy-relevant research, translate theory into practical applications, and adapt professional knowledge and technical skills to analyze, diagnose, and propose solutions to policy issues and challenges related to climate change and disaster risk management.
- Capacity for effective multi-tasking with a demonstrated ability to be an independent starter with minimal supervision and a high capacity to persevere for results.
- Strong communication and advocacy skills, including the ability to write concisely and clearly and synthesize complex documentation and ideas for a range of audiences, including through social media.
- Excellent interpersonal skills and a proven ability to work effectively in a team and intercultural environment.
- Proficiency in English and the ability to work in an environment of diverse cultures.
- Ability to work independently with minimum supervision and to meet tight deadlines.

How to apply?

To apply to the Disaster and Risk Data Fellowship program, please fill out the following form by September 26, 2025. Applications received by email will not be considered. For any question related to the program, please write to Andrea Garcia agarciatapia@worldbank.org, copy to Nuala Cowan ncowan@worldbank.org, with the subject "Risk Data Fellow".

ANNEX - LIST OF POTENTIAL ROLES/TASKS

The following list of roles and associated tasks is intended to provide an example of the types of skills and/or assistance that Task Teams may request from a potential fellow. These role/task categories are fluid, and each position description can be customized to meet the specific needs of the operation.

1. Data Readiness & Advisory

Data Readiness & Advisory Fellows provide subject matter expertise to World Bank Operational teams that need to use data, specifically geospatial data, for their projects, either at the preparatory or operational stages. The Fellow will support the team with developing TOR's for data collection, analytics, and/or communication. The Fellow will also provide program design expertise concerning data needs, requirements, and assessments. The fellow will ensure the organization's data is prepared, accessible, and aligned with strategic goals. The ideal candidate will have a passion for data governance, a strong analytical mindset, and the ability to guide various stakeholders on data-related matters.

Key Responsibilities:

1. **Data Governance and Compliance:**
   - Collaborate with cross-cutting teams to establish and enforce data governance policies and procedures.
   - Monitor and ensure compliance with data privacy regulations and industry standards to maintain data integrity and security.
2. **Data Quality Assurance:**
   - Assess the quality of incoming data and work with data producers to implement improvements.
   - Develop and maintain data quality metrics and reports to track progress over time.
3. **Data Advisory Services:**
   - Provide expert advice and guidance to business units and project teams on data-related matters.
   - Act as a stakeholder consultant, offering insights into best practices and recommending data-driven solutions.
4. **Data Readiness Assessments:**
   - Conduct assessments of data readiness for new projects, ensuring that data requirements are clearly defined and met.
   - Collaborate with IT teams to ensure infrastructure and systems support data readiness objectives.
5. **Data Training and Education:**
   - Develop and deliver training programs on data readiness best practices for both technical and non-technical staff.
   - Foster a data-driven culture by promoting awareness and understanding of the importance of data quality and governance.

2. Risk Data Analytics

Data Analytics activities include database design, data management, and fundamental statistical analysis. The successful candidate will play a crucial role in transforming raw data into actionable insights, driving informed decision-making across various stakeholders. As a Data Analyst, they will collect, process, and analyze large datasets to uncover trends, patterns, and valuable business insights.

Key Responsibilities:

1. **Data Collection and Cleaning:**
   - Gather, organize, and clean large datasets from various sources to ensure accuracy, quality, and completeness.
   - Collaborate with data engineers to streamline data pipelines and enhance data quality.
2. **Data Analysis and Interpretation:**
   - Conduct exploratory data analysis to identify trends, patterns, and anomalies.
   - Perform statistical analysis to derive meaningful insights and present findings clearly and understandably.
   - Translate complex data into actionable recommendations for business stakeholders.

3. Risk Data Communication

Data Communications activities include supporting operations with data visualization and data journalism, helping to translate technical data into non-technical language for diverse audiences. Fellows will help construct the data storytelling behind the project and assist in communicating the results to the main stakeholders and broader audience. The fellow will translate complex data into compelling narratives that resonate with diverse audiences. The ideal candidate will possess a passion for storytelling, data visualization, and the ability to communicate complex technical concepts in a clear and accessible manner.

Key Responsibilities:

1. **Data Storytelling:**
   - Collaborate with data analysts and scientists to understand complex datasets and distill key insights into compelling and accessible stories.
   - Develop narratives that effectively convey data-driven insights to diverse stakeholders, including executives, team members, and clients.
2. **Data Visualization:**
   - Design and develop visually impactful data visualizations, dashboards, and reports using tools like Tableau, Power BI, or other visualization platforms.
   - Ensure visualizations align with best practices for effective communication and user engagement.
3. **Communication Strategy:**
   - Work closely with cross-cutting teams to develop and execute communication strategies for data-related initiatives.
   - Tailor communication approaches to different audiences, considering their level of technical expertise and specific information needs.
4. **Training and Workshops:**

- Conduct training sessions and workshops to empower team members with the skills to communicate data insights effectively.
- Provide guidance on best practices for data presentation and communication.

5. **Data Advocacy:**
- Advocate for the value of data-driven decision-making within the organization.
- Collaborate with teams to identify opportunities to integrate data communication into various business processes.

4. Machine Learning /Earth Observation

Machine Learning/Earth Observation Fellows will provide expertise to World Bank Operational teams using Earth observation data and Machine learning Models to support their operations. The fellow will leverage machine learning techniques to analyze and derive insights from Earth Observation data. The ideal candidate will possess a strong background in machine learning and remote sensing, with a passion for applying advanced analytics to address environmental challenges.

Key Responsibilities:

1. **Machine Learning Algorithm Development:**
- Design and develop machine learning algorithms for analyzing Earth observation data.
- Implement and optimize algorithms for land cover classification, change detection, and environmental monitoring to enhance data-driven decision-making.

2. **Data Processing and Integration:**
- Preprocess and integrate Earth observation data from various sources, ensuring data quality and compatibility across all datasets.
- Collaborate with data engineers to streamline data pipelines and automate data processing tasks.

3. **Model Training and Evaluation:**
- Train machine learning models using labeled datasets and satellite imagery.
- Evaluate model performance, iterate on models, and implement improvements to enhance accuracy and robustness.

4. **Remote Sensing Applications:**
- Apply machine learning techniques to solve real-world problems related to environmental monitoring, climate change, and natural resource management.
- Collaborate with domain experts to identify and address specific challenges using Earth observation data.

5. **Research and Innovation:**
- Stay abreast of the latest advancements in machine learning, remote sensing, and Earth observation technologies.
- Contribute to research projects and explore innovative approaches to improve the application of machine learning in Earth observation.

6. **Collaboration and Communication:**
- Work closely with interdisciplinary teams, including scientists, engineers, and domain experts, to integrate machine learning solutions into larger projects and initiatives.
- Communicate findings and insights effectively to both technical and non-technical stakeholders.

5. Risk Data Sharing

The Fellow will be responsible for curating, managing, and optimizing the accessibility of risk-related data within WB projects. The ideal candidate will possess a strong understanding of risk management and data governance, as well as a keen interest in organizing data to support informed decision-making. One option will be to leverage the Risk Data Library Standard (RDLS). This open data standard facilitates easier collaboration with disaster and climate geospatial risk data.

Key Responsibilities:

1. **Data Curation and Management:**
   - Curate and organize a comprehensive library of risk-related data, including financial data, market trends, and other relevant information.
   - Develop and implement data management processes to ensure the quality, accuracy, and integrity of the risk data library.
2. **Data Accessibility and Distribution:**
   - Establish protocols for efficient data retrieval and distribution within the organization.
   - Collaborate with stakeholders to understand their data needs and ensure timely access to relevant risk-related datasets.
3. **Data Governance and Compliance:**
   - Implement and enforce data governance policies and procedures to ensure compliance with industry regulations and internal standards.
   - Work closely with legal and compliance teams to address data privacy and security requirements.
4. **Collaboration with Data Providers:**
   - Collaborate with external data providers to acquire and integrate relevant risk data sources into the library.
   - Negotiate data licensing agreements and manage relationships with external data vendors.
5. **Documentation and Metadata:**
   - Create comprehensive documentation and metadata for datasets in the risk data library.
   - Ensure that metadata is accurate, up-to-date, and aligned with industry standards.
6. **Data Analysis Support:**
   - Help risk analysts and decision-makers locate and understand relevant risk assessment and modeling data.
   - Collaborate with analytics teams to enhance the library's value for risk analysis and decision-making.