

*Welcome!*

# **Examining the effects of Global Economic Crisis (GEC) on poverty through natural disasters impacts - An Overview of the UNOOSA RIVAF Project**

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*Forth United Nations International UN-SPIDER Bonn Workshop*

*" The 4C - Challenge: Communication - Coordination - Cooperation - Capacity Development "*

*13 October 2010*



**R·I·T**

# Overview

- **Background - Global Pulse and RIVAF**
- **UNOOSA RIVAF Project - Concepts**
- **UNOOSA RIVAF Project - Technology**
- **Next Steps**

# Global Pulse



<http://www.unglobalpulse.org/>

# Rapid Impact and Vulnerability Analysis Fund - RIVAF

The screenshot shows a Mozilla Firefox browser window displaying the Rapid Impact and Vulnerability Analysis Fund (RIVAF) website. The address bar shows the URL: <http://www.unglobalpulse.org/projects/rapid-impact-and-vulnerability-analysis-fund-rivaf>. The website header includes the Global Pulse logo and the tagline "Harnessing innovation to protect the vulnerable". A navigation menu contains links for Home, Projects, Blog, Events, Resources, About, and Contact. The main content area is titled "Rapid Impact and Vulnerability Analysis Fund (RIVAF)" and contains a detailed description of the fund's purpose and a list of criteria for proposals. A sidebar on the right provides additional information, including project details, focus areas, length, partners, and a list of resources and blog entries.

**Rapid Impact and Vulnerability Analysis Fund (RIVAF)**

In December 2009, the Deputy Secretary-General launched the Rapid Impact and Vulnerability Analysis Fund (RIVAF) as part of the Global Pulse initiative. The RIVAF grant-making mechanism will support innovative, real-time data collection and analysis to help develop a better understanding of how vulnerable populations cope with the impacts of global crises.

The first phase of RIVAF disbursement was targeted at UN agencies. It was generously funded by the UK's Department for International Development (DfID). Fifteen applications were received by mid-January 2010. Proposals were assessed against the following set of criteria:

- Use of a well defined analytical framework,
- A robust methodology, specifying a clear hypothesis and questions,
- Target groups living below or just above the poverty line,
- Inclusion of groups or regions falling outside current

**PROJECT DETAILS**

**Focus**  
Support to innovative, real-time data collection and analysis

**Length**  
February 2010 - April 2011

**Partners**  
DFID, Government of Sweden, various UN agencies

**Resources**  
Vulnerability reports & analysis

**Connect** [f](#) [t](#) [You Tube](#)

**BROWSE BY REGION**

Global	7
Africa	7
Asia	5
Latin America and the Caribbean	4
Europe	1
Northern America	1

**LATEST BLOG ENTRIES**  
SEP 27, 2010

<http://www.unglobalpulse.org/projects/rapid-impact-and-vulnerability-analysis-fund-rivaf>



# Global Economic Crisis

Financial Crisis - The World Bank - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.worldbank.org/financi

Google Translate

Financial Crisis - The World Bank

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Topics in Development

Search  GO

More Options

Home > Topics > Financial Crisis

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## Financial Crisis

**What the World Bank Is Doing**

Though the most acute phase of the global financial crisis has passed, recovery remains fragile. Persistent risks to economic health include high unemployment and low growth in developed countries and scarce international financing for developing countries. The poorest countries continue to need assistance to move beyond the crisis. [Read More](#)

**Spring Meetings 2010: Regions Address Post-Crisis Economic Trends**

- > Africa: 'Time to Invest'
- > Latin America: Commodities 'A Boon'
- > Europe/Central Asia: 'Slow Recovery Ahead'

**PHILIPPE LE HOUEROU**

**Africa: Rethinking Globalization After the Crisis**

**March 2010**—A live, teleconferenced debate connects experts from five African countries to address the continent's export competitiveness.

**GLOBAL DEVELOPMENT DEBATES 2010**

**SEE RESULTS**

**WHAT'S NEW**

- > **Case Study:** Financing for Clean Technologies in Mexico (pdf), Apr 10
- > **Report:** EU10 Regular Economic Report, Apr 10
- > **Policy Brief:** Bank Governance: Lessons from the Crisis, Mar 10 (pdf)



# UNOOSA RIVAF

**“A Visual Analytics Approach to Understanding Poverty Assessment through Disaster Impacts in Africa”**

## Partners



# UNOOSA RIVAF - Objectives

1. Understand Global Economic Crisis (GEC) effects on relationships between *livelihood, poverty, and vulnerability to natural disasters*
2. Understand how natural disaster impacts are potential indicators of GEC impacts on the poor and vulnerable.



# UNOOSA RIVAF - Questions

*How specifically have livelihoods been affected by the Global Economic Crisis?*





# UNOOSA RIVAF - Questions

*How have  
impacts on  
livelihood  
exacerbated  
vulnerability to  
natural hazards?*



# UNOOSA RIVAF - Questions

*How do impacts from natural disasters reveal vulnerabilities present before an event and forecast vulnerability after an event?*



# Visual Analytics

- **Visual Analytics** - *the science of analytical reasoning facilitated by interactive visual interfaces*
- Computational methods, and knowledge construction, representation, and management strategies
- **End goal of Visual Analytics investigation**
  - Dissemination of results to decision makers
  - Succinct communication of the interpretations made by an analyst or group of analysts



# Visual Analytics

- ... the science of analytical reasoning facilitated by interactive visual interfaces
  - ... thus, the focus is on assembling evidence, generating inferences and explanations from evidence, and comparing / assessing those inferences and explanations
  - visualization, while important, is not the central focus - the focus is “visual interfaces” and their role in enabling reasoning



# Visual Analytics/Sensemaking

## Research applied to disaster management:

- Increasing diverse forms of geo-information
- Huge volumes, non-traditional sources
- Large/complicated analytical/sensemaking tasks

The collage consists of several overlapping images:

- Top Left:** A screenshot of a Google News search for "disaster". The search results show various news items, including "Many unprepared for a disaster" and "FEMA Administrator To Tour Greensburg, Kansas Tornado Disaster Area".
- Top Center:** A screenshot of a weather map from AccuWeather.com, showing a map of the United States with a "PLAY" button and "Weather Videos" text.
- Top Right:** A hand holding a flip phone, displaying a map on its screen.
- Bottom Center:** An email interface showing a message from "ISCAM2007 Conference" with the subject "Preliminary Program of ISCRAM2007". The email body contains details about the conference, including dates, topics, and a list of speakers.

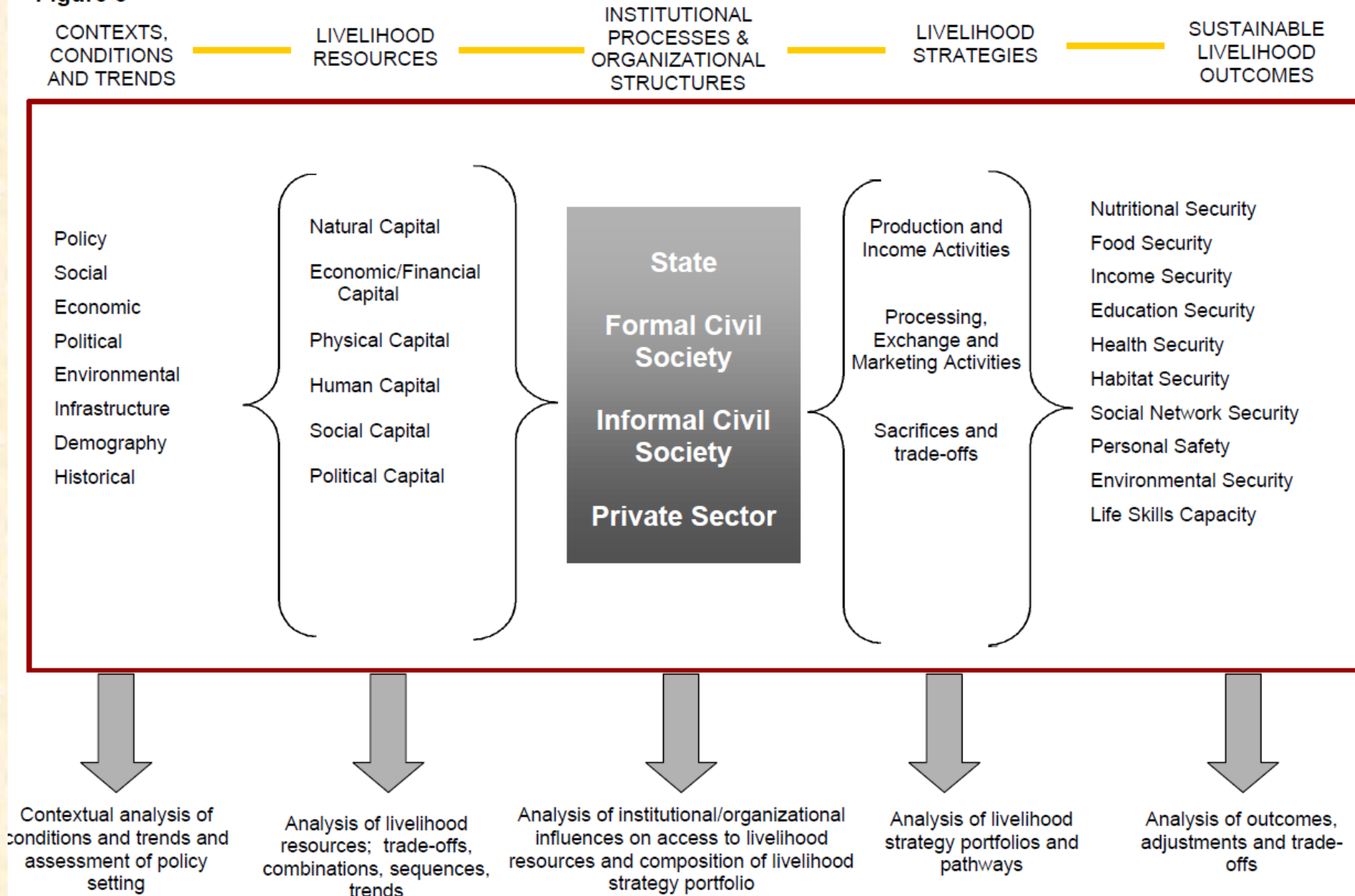
# UNOOSA RIVAF

Target Countries: Burkina Faso and Guatemala



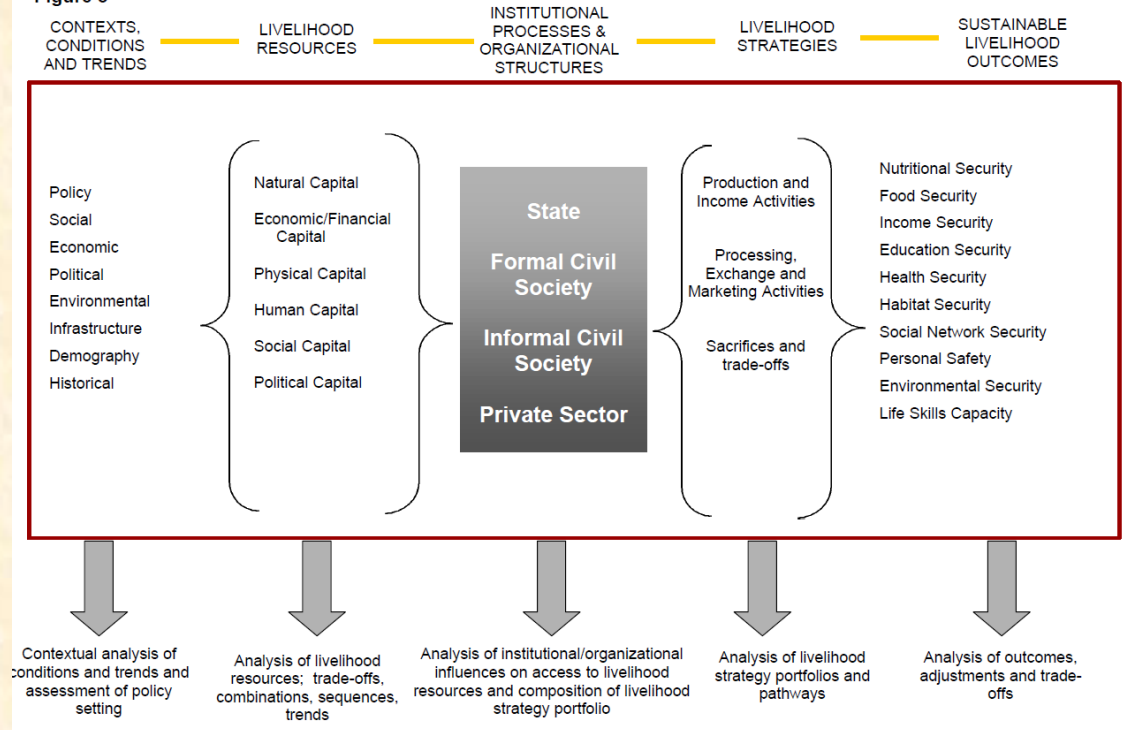
## CARE FRAMEWORK

**Figure 3**



## CARE FRAMEWORK

Figure 3



Through visual analytics, the project must allow people to become aware of:

- The impact of the GEC on assets or capitals;
- The vulnerability of assets or capitals;

How the GEC impacted assets or capitals, which then increased the vulnerability of such assets or capitals; transforming the livelihood outcomes (securities) into insecurities:

- Personal insecurity
- Food insecurity
- Habitat insecurity
- Health insecurity
- Income security



# **Visual Analytic Globe**

**Prototype visual analytic environment**

**Convincing analysis of GEC impacts on the poor and/or vulnerable**

**Visually-oriented analytical products - combined geographic map, timeline and data graph artefacts**

**Theoretically motivated by calls within the United Nations community for the increased use of visualization for decision making**

# Open source media analysis

**Data Views**

Search Results Ranked by Relevance to Query Size 10 Result Set Options

**Africa: Price Hikes, Migration, Displacement & Food Sovereignty**  
Thu Apr 17 2008  
A project of the A think tank without walls The Institute for Policy Studies, Foreign American Friends Service Committee present a discussion with Mamadou...  
[http://www.fpif.org/events/africa\\_price\\_hikes\\_migration\\_displacement\\_food\\_sovereignty](http://www.fpif.org/events/africa_price_hikes_migration_displacement_food_sovereignty)  
[View in Google Earth](#) [View on the Map](#)

**Samba prescribes recipe against food crisis in Africa**  
Sat Apr 5 2008  
May 12th To survive the looming global hunger tsunami, Africa must embrace agriculturalise, re-Africanise and re-democratise," according to Dr. Ebrahim Malick  
<http://www.afriquejet.com/news/africa-news/samba-prescribes-recipe-against-food-crisis>  
[View in Google Earth](#) [View on the Map](#)

**DEVELOPMENT: Food Shortages an Emergency - FAO Chief**  
Wed Apr 9 2008  
Food Shortages an Emergency - FAO Chief By Ranjit Devraj "In the face of food r in Africa and Haiti, we really have an emergency," Diouf said at a news...  
<http://www.ipsnews.net/news.asp?idnews=41932>  
[View in Google Earth](#) [View on the Map](#)

**2007-08-10 Can Africa Meet the Millennium Development Goals by 2015 ?**  
Fri Aug 10 2007  
Hello and welcome to this edition of , here on China Radio International. I'm you "Reduce by half the proportion of people living on less than a dollar a day"...

Selected Item Details: ☒ Toggle Named Entities  
Concepts Found: food

A project of the A think tank without walls **The Institute** for Policy Studies, Foreign Policy In Focus, and **The American Friends Service Committee** present a discussion with Mamadou Goita. Mamadou Goita, an internationally renowned economist and social activist, will address the impact of recent price hikes in **food** staples on communities that are already at the brink, in **Mali** and elsewhere in **Africa**. The discussion will cover the growing presence of **US** corporations in **Africa** **food** systems and the impact of the so called "Green Revolution" in **Africa**. Mamadou will also address the broader context of increased economic pressures that are forcing African farmers and workers to leave their homes in search of opportunities in Europe, the Middle East, and the **United States**. Mamadou Goita is the executive director of the Institute for Research and the Promotion of Alternatives in Development (IPAR) in **Mali**, **West Africa**. Mamadou is a core member of the World Social Forum Coordinating Body. He coordinated the 2006 World Social Forum and the 2007 World **Food** Sovereignty Forum. Mamadou teaches at the **University of Ouagadougou (Burkina Faso)**, at the

**Content**

**Map Virtual Globe Web Browser Hypotheses and Evidence**

[Web](#) [Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Mail](#) [more](#) ▼

[brianbanjo@gmail.com](#) | [My Account](#) | [Sign out](#)

**Google news** food migration Burkina Faso [Search Archive](#)

☐ Search all prices ☒ Search content with no price

**News Archives** Results 1 - 5 of about 10 for food migration Burkina Faso . (0)

[View recent news results for food migration burkina faso](#)

**May, 2007 - May, 2008** From  To

**DEVELOPMENT: Food Shortages an Emergency - FAO Chief**  
Inter Press Service - Apr 9, 2008  
Diouf, who blamed the crisis primarily on the steady migration of rural ... "We have seen Cameroon, Haiti and **Burkina Faso**," Diouf said. ...  
[All 33 related](#) - [Related web pages](#)

**Africa: Price Hikes, Migration, Displacement & Food Sovereignty**  
Foreign Policy In Focus - Apr 17, 2008  
... will address the impact of recent price hikes in **food** staples on communities ... Unive Ouagadougou **Burkina Faso** at the Applied Economic National ...  
[Related web pages](#)

**Samba prescribes recipe against food crisis in Africa**  
Afrique en ligne - Apr 5, 2008  
The people of **Burkina Faso** a desert nation now eat fish largely because after ... to mak attractive in order to reverse the ruralurban migration ...  
[Related web pages](#)

**A Global Trek to Poor Nations, From Poorer Ones**  
New York Times - Dec 27, 2007  
This is the sixth in a series of articles examining global migration and its consequence from **Burkina Faso** tend the fields in Ivory Coast. ...  
[All 3 related](#) - [Related web pages](#)



# Open source media analysis

The screenshot displays a web-based interface for open source media analysis, divided into two main panels: "Data Views" on the left and "Content" on the right.

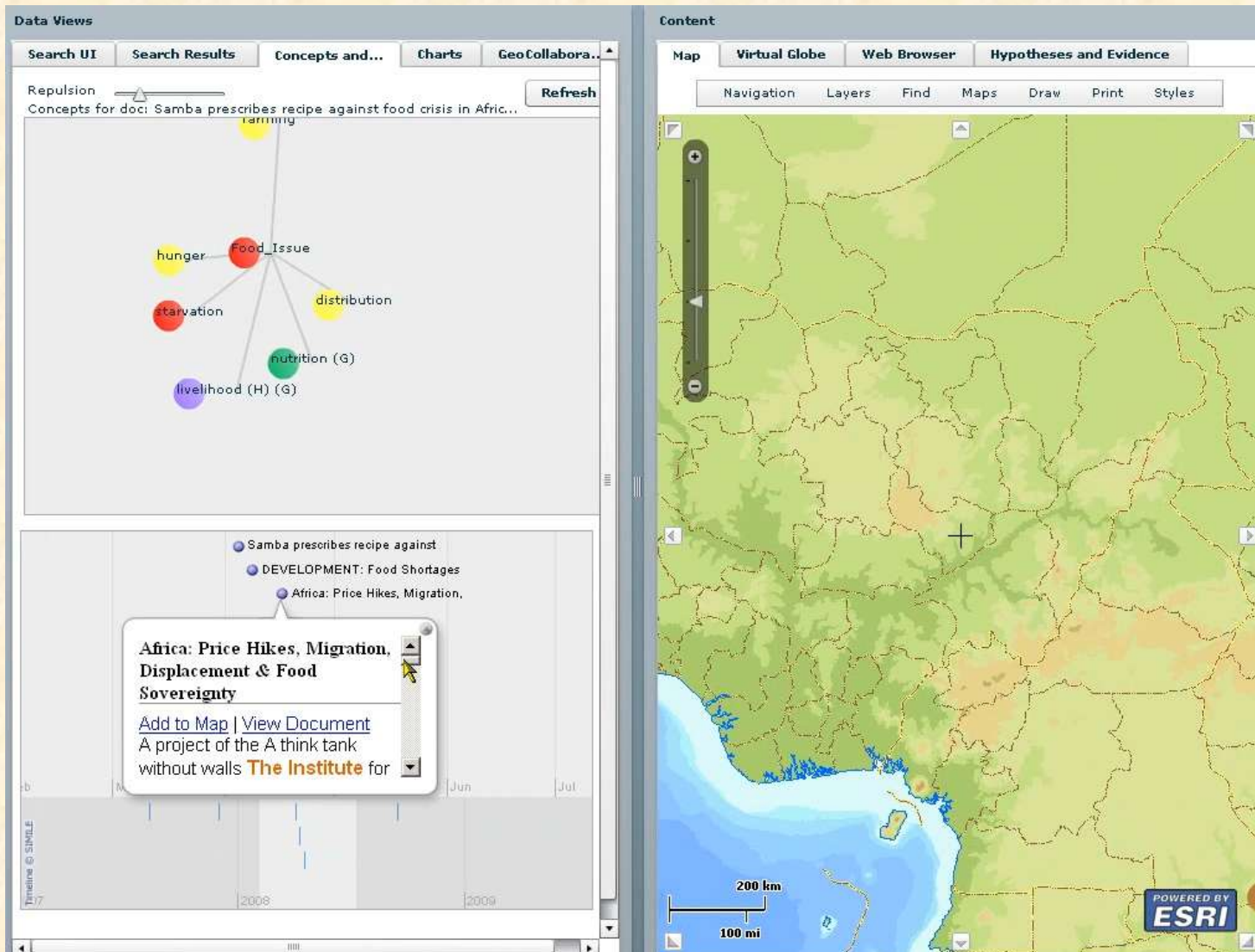
**Data Views Panel:**

- Search Results:** Ranked by Relevance to Query Size 10. Includes a "Result Set Options" button.
- Selected Item:** "Africa: Price Hikes, Migration, Displacement & Food Sovereignty" (Thu Apr 17 2008). The description mentions a project by The Institute for Policy Studies, Foreign American Friends Service Committee, and Mamadou Goita. It includes links to "View in Google Earth" and "View on the Map".
- Other Results:** "Samba prescribes recipe against food crisis in Africa" (Sat Apr 5 2008) and "DEVELOPMENT: Food Shortages an Emergency - FAO Chief" (Wed Apr 9 2008).
- Selected Item Details:** A checkbox for "Toggle Named Entities" is checked. Below, "Concepts Found: food" is listed. The detailed text describes Mamadou Goita's role and the discussion topics, including price hikes in food staples in Mali and Africa, the impact of US corporations, and the "Green Revolution" in Africa.

**Content Panel:**

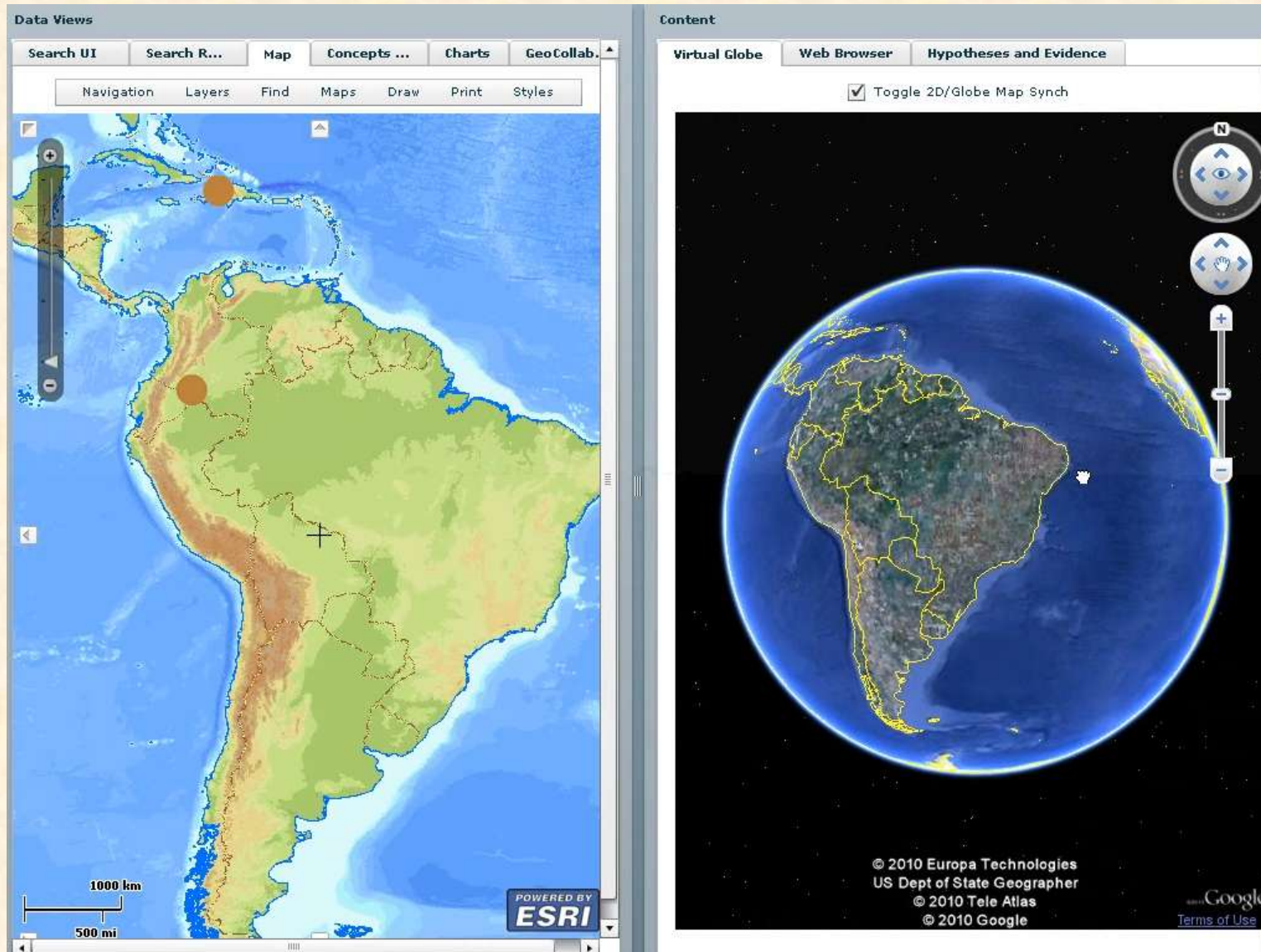
- Map:** A satellite map of Africa with a red dot indicating the location of Mali. A scale bar shows 1000 km and 500 mi. The "POWERED BY ESRI" logo is visible.
- Virtual Globe:** A button to switch to a 3D globe view.
- Web Browser:** A button to open the content in a web browser.
- Hypotheses and Evidence:** A button to view related information.
- Navigation:** A toolbar with buttons for "Layers", "Find", "Maps", "Draw", "Print", and "Styles".
- Place Reference Snippets:** A text box containing snippets of text related to the map location, such as "... on communities that are already at the brink, in **Mali** and elsewhere in Africa. The discussion will [...]" and "... of Alternatives in Development (IPAR) in **Mali**, West Africa. Mamadou is a core member of the [...]"

# Knowledge Integration via Semantic Web Technology and Temporal Information Integration

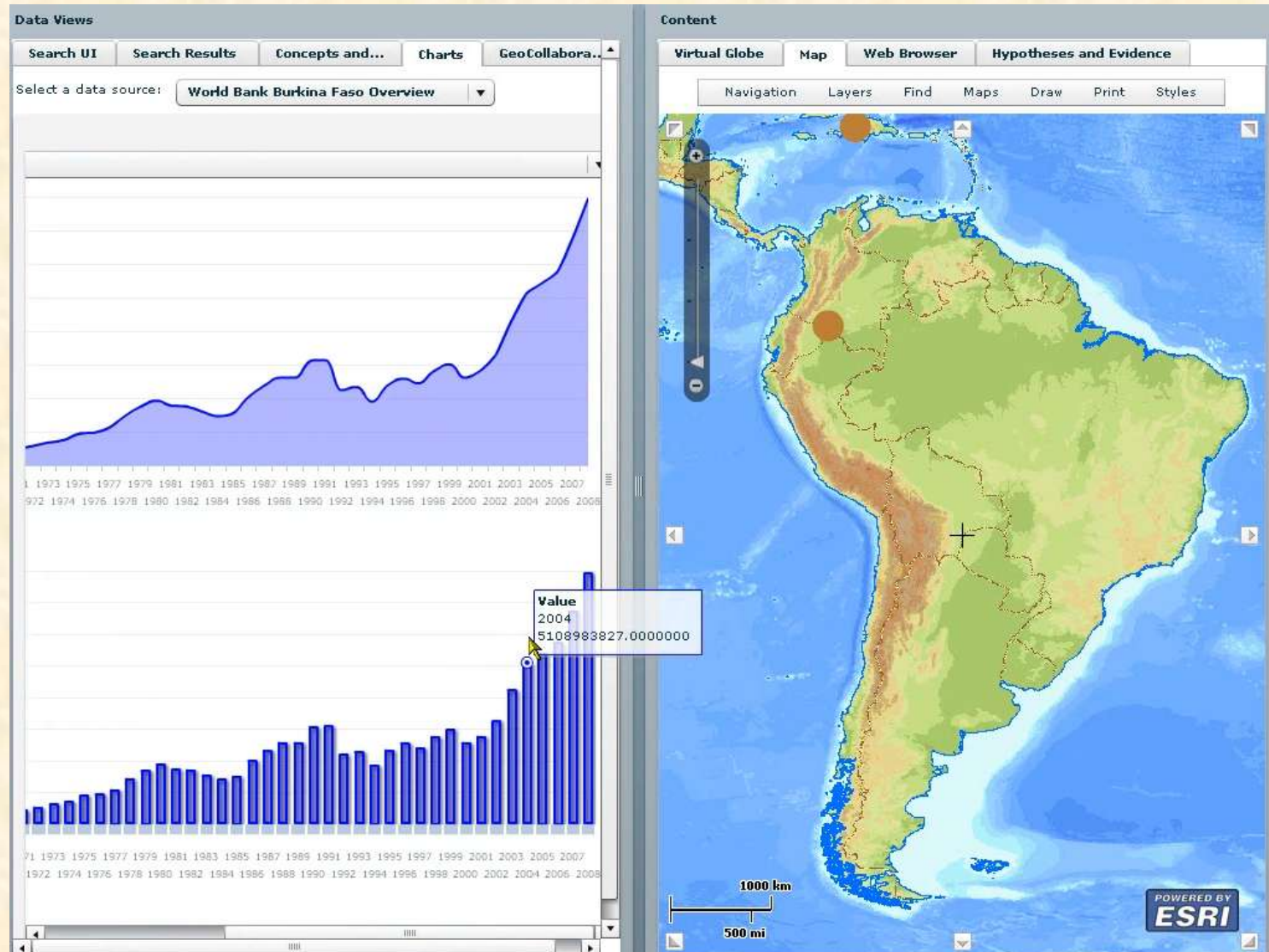




# Integrated Geospatial and Space-based Technologies



# Quantitative Data Analysis





# Geocollaboration and Social Networking

**Data Views**

Search UI Search Results Concepts and... Charts GeoCollabora...

**GeoMessages Received From Others**

Message From	Message To	Date Sent	Subject
UNOOSA	RIVAF - ALL	2010-01-18 2	IDP
UNICEF	RIVAF - ALL	2010-05-04 1	Water
Lorant	Space-aid grou	2010-05-04 1	Migration
OCHA	GIVAS - Recov	2010-05-06 1	Flooding
RIT	UN-SPIDER	2010-05-07 1	Imagery

**Create New GeoMessage**

From: Brian

To: RIVAF

Subject: Area for meeting

Message:

☐ Include Selected Annotation

**Send Message** **Cancel**

Message Bo  
NDVI chang

Has WMS? - No  
Has Annotation? - Yes

**View GeoMessage on Map** **Compose GeoMessage**

**Content**

Virtual Globe Map Web Browser Hypotheses and Evidence

Navigation Layers Find Maps Draw Print Styles

Map showing a region in Madagascar with various geographical features and a red line indicating a path. The map includes labels for lakes, rivers, and reserves, and a scale bar at the bottom left.

# Hypotheses Generation to Support Evidence Based Decision Making

Data Views

Search UI | Search Results | Concepts and... | Charts | GeoCollabora...

GeoMessages Received From Others

Message From	Message To	Date Sent	Subject
UNOOSA	RIVAF - ALL	2010-01-18 20	IDP
UNICEF	RIVAF - ALL	2010-05-04 10	Water
Lorant	Space-aid group	2010-05-04 10	Migration
OCHA	GIVAS - Recovery	2010-05-06 10	Flooding
RIT	UN-SPIDER	2010-05-07 10	Imagery

Message Body:

View GeoMessage on Map | Compose GeoMessage

Content

Virtual Globe | Map | Web Browser | Hypotheses and Evidence

Working Hypotheses

Increased Migration after 2007 Flood

Evidence

Increased Food Aid


Date

09/02/2007

Description

UNICEF provides large volume of food

Visual:



New | Record 2 of 4 | Delete



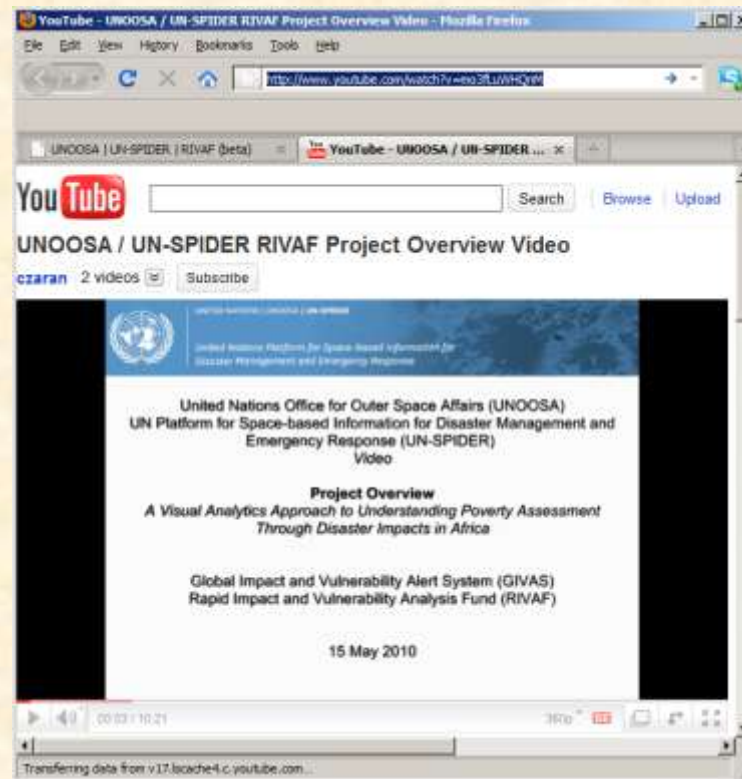
# Next steps

- Data collection - spatial, imagery, open source
- Data analysis - matching data to theoretical frameworks
- Develop final reports - final analysis, repeatable methodology

# For more information..

<http://un-spider.org/rivaf/>

<http://www.youtube.com/watch?v=mo3fLuWHQnM>



**Questions/Comments:**

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**Thank you!**