



**Sahana Eden
Open Source
Disaster Management Platform**

**foss
asia**

13th November 2010
Michael Howden
michael@sahanafoundation.org

<http://eden.sahanafoundation.org>



Overview

- Introduction
- What is Sahana Eden
- How you can get involved in Sahana Eden
- Tomorrow's Workshop



Introduction Myself

Michael Howden

michael@sahanafoundation.org

- Software Engineer from New Zealand
- Worked for NGOs in
 - Indonesia - Pakistan -Uganda
 - India - UK - **Thailand**
- Sahana Eden Project Management Committee
- Co-founder AidIQ



2004 Asian Tsunami

- At least 226,000 dead in 14 countries.
- Up to 5 million people lost homes, or access to food and water
- 1 million people left without a means to make a living
- At least \$7.5 billion in the cost of damages





Problems

- The trauma caused by waiting to be found or find the next of kin
- **Coordinating** all aid groups and helping them to operate effectively as one
- **Managing** the multitude of requests from the affected region and matching them effectively to the pledges of assistance
- **Tracking** the location of all temporary shelters, camps, etc.





How Can IT Help?

- Live Situational Awareness
- Scalable
- Automatic Collation, Processing and Analysis
- Efficient Distribution

Technology can address many of the data management challenges and requirements by providing solutions that are scalable, efficient, automatic and by providing live data and situational awareness to both emergency managers and the community.

All of these support better, quicker decisions

Sahana Eden



[Home](#) [Map](#) [Missing Persons](#) [Requests](#) [Hospitals](#) [Volunteers](#) [more](#) [Administration](#) [Language](#) michael@sahanafoundation.org [Help](#)

Sahana Eden Open Source Disaster Management Platform

SITUATION

[Incidents](#)

[Basic Assess.](#)

[Warehouses](#)

[Mobile Assess.](#)



DECISION

[Gap Report](#)

[Gap Map](#)

[Map](#)



RESPONSE

[Activities](#)

[Requests](#)

For more details on the Sahana Eden system, see the [Sahana Eden Website](#)
For live help from the Sahana community on using this application, go to [Sahana Community Chat](#)
Administrator: Sahana Administrator
Email: support@Not Set
Telephone: Not Set
Loading...



Sahana Applications

- Organisation List
- Inventory/Warehouse Management
- Incident Reporting
- Request Management
- Assessments
- Project Tracking
- *and more...*



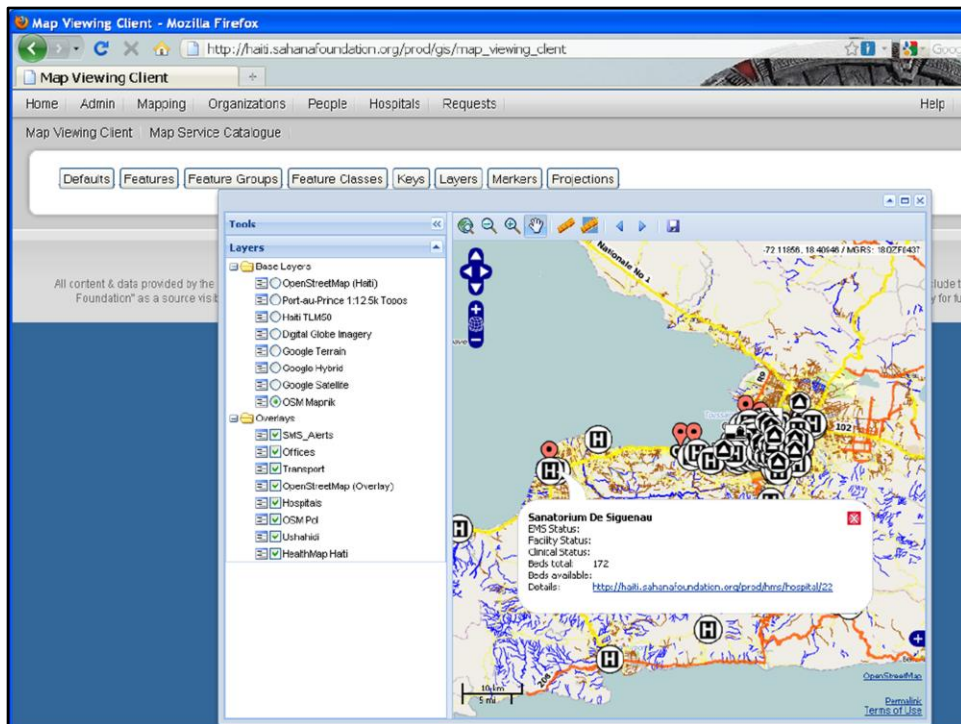
History

- 2005** - Developed in Sri Lanka (Tsunami)
 - Pakistan (Earthquake)
- 2006** - Phase II (Agasti)
- 2007** - New York City (Preparedness)
 - Philippines (Typhoons/Landslides)
- 2008** - Sahana Eden Founded
 - Sichuan (Earthquake)
- 2010** - Haiti (Earthquake)
 - Pakistan (Floods)
 - Disaster Risk Reduction Project Portal

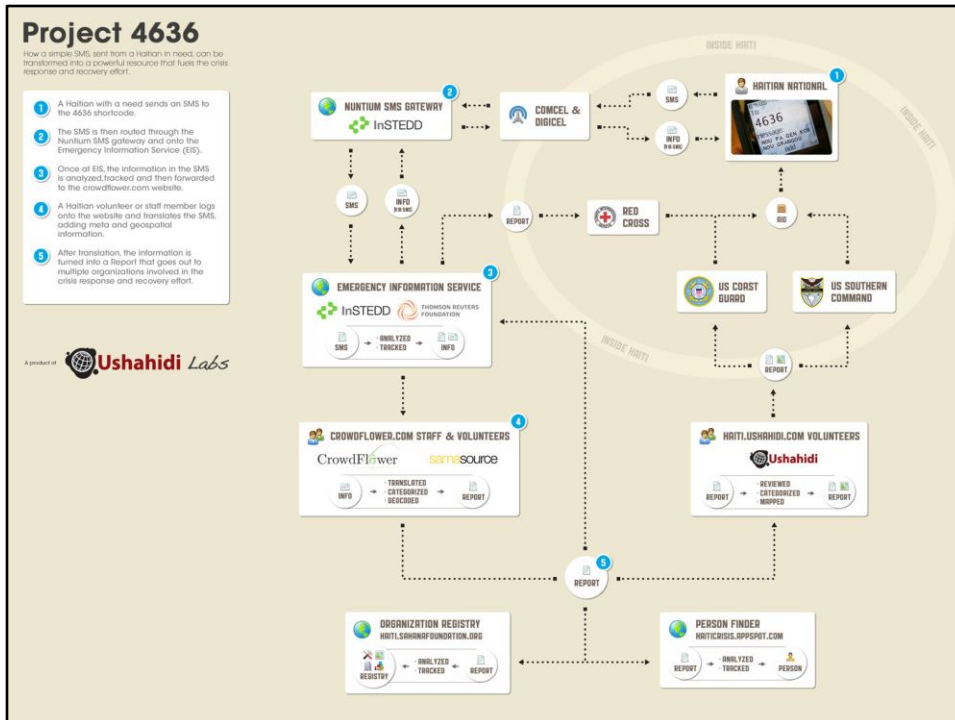


Technologies

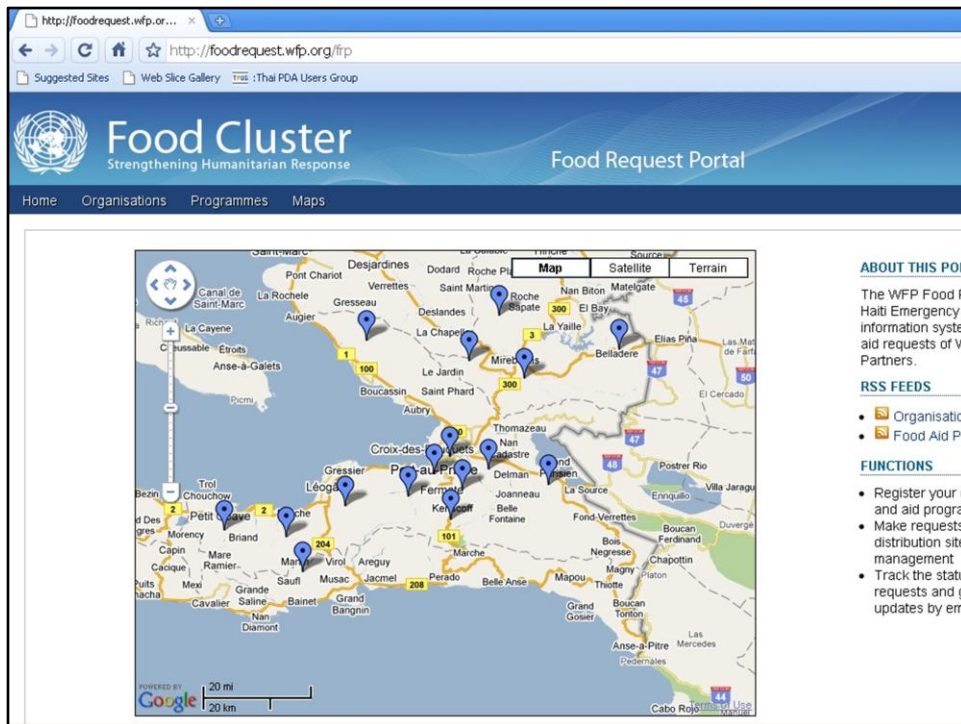
- Python
- Web2Py
 - Open Source Web Application Framework
 - REST Controller
 - Open Data Standards
- JavaScript Library – for usability
 - jQuery
 - Sencha



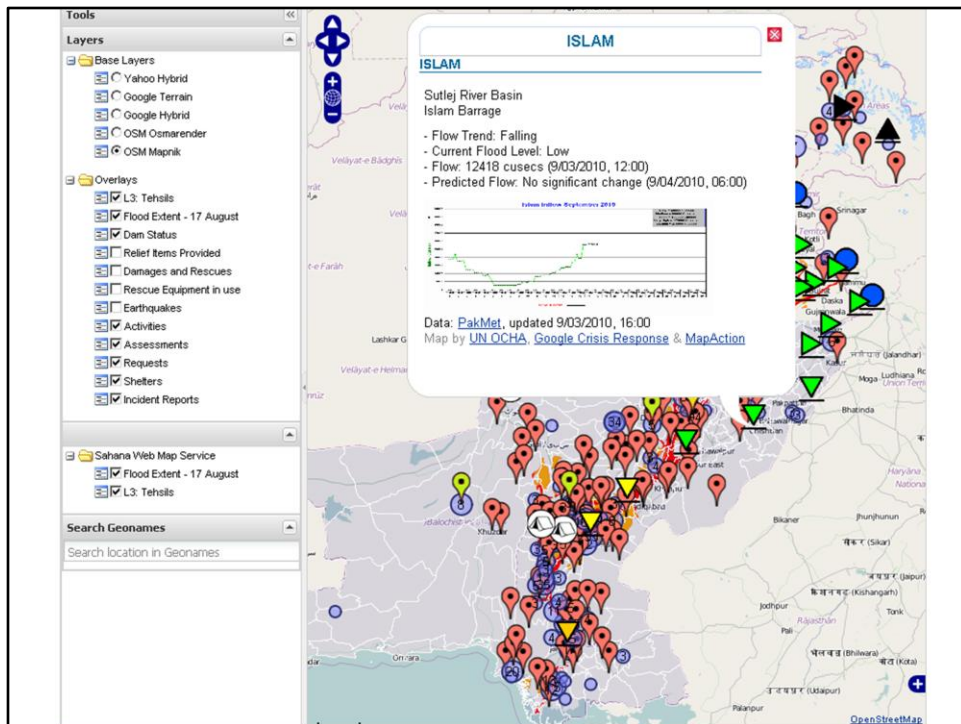
Sahana Eden - Haiti



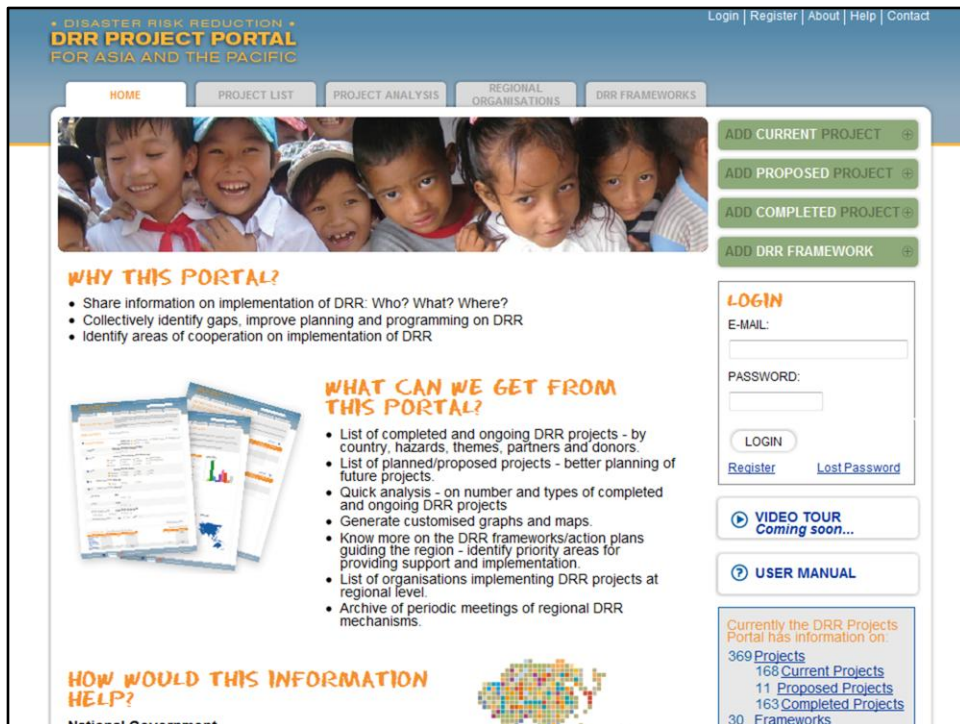
Project 4636 – Haiti
 Sahana integrating with other systems



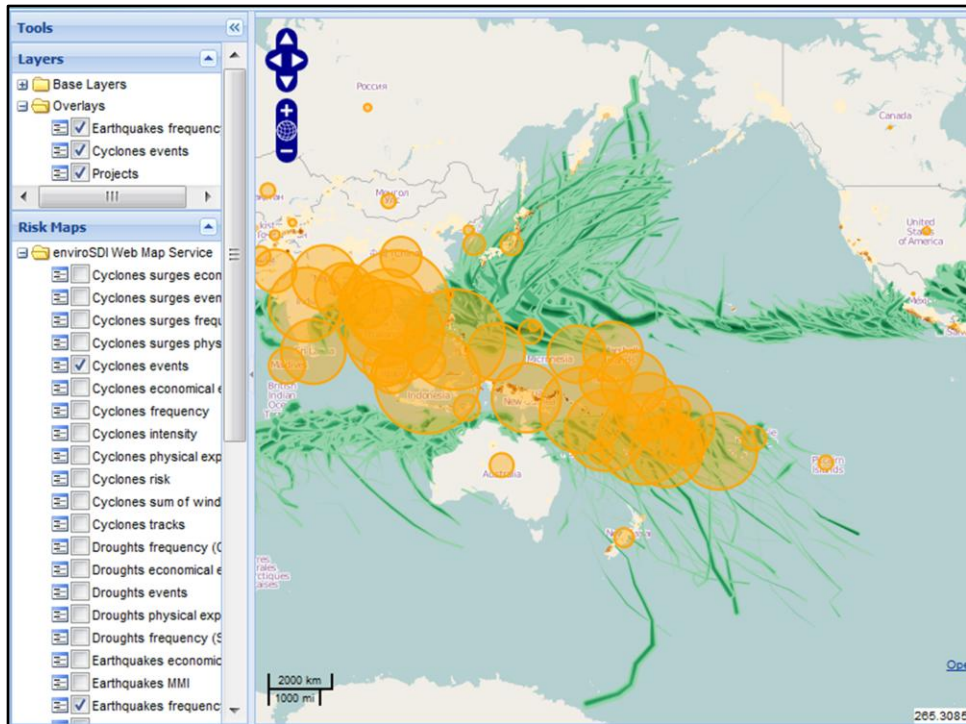
World Food Program (WFP) Food Request Portal – Haiti
Built with Sahana Eden



Sahana Eden - Pakistan



Disaster Risk Reduction Website
 Built with Sahana Eden

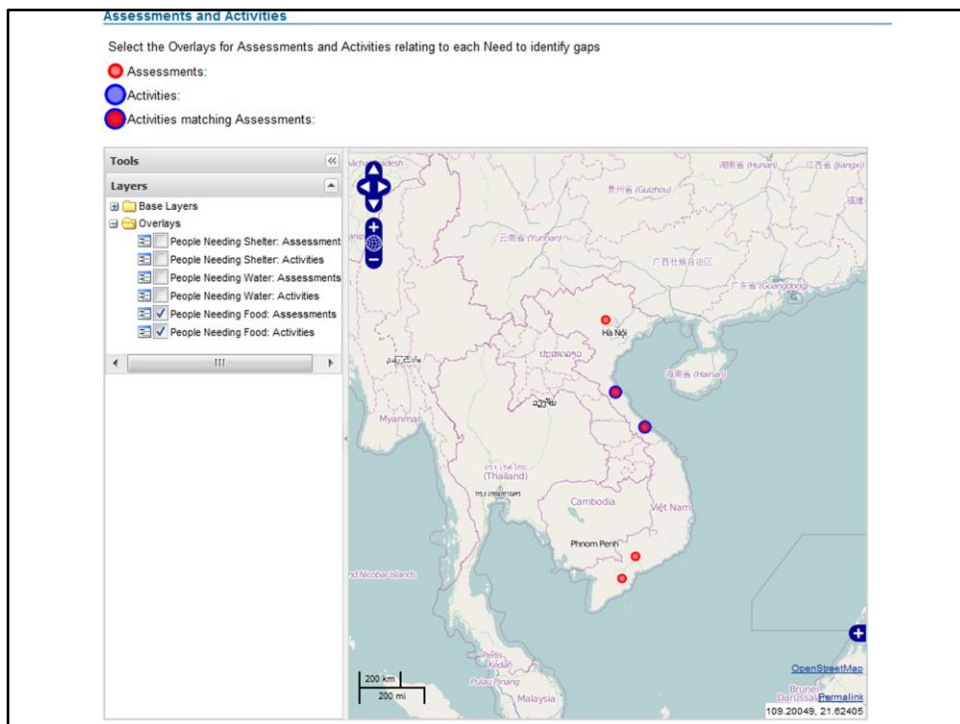


Disaster Risk Reduction Website

Geographic data such as the cyclone tracks can be imported from other systems



Sahana being used as part of a session on IT in the Asian Disaster Preparedness Center's Disaster Management Course



Gap Analysis Map – Decision Support Tool



Sahana Platform

Rapid Application Development Platform

- Mapping and GIS
- Messaging
 - Email
 - SMS
 - Twitter
 - Chat
- Open\Flexible Data Input / Output
 - XML
 - JSON
 - EDXL
 - KML
 - RSS
 - XSLT
 - XLS
 - PDF

Sahana Eden's Community



- Sahana Software Foundation
- IBM
- Google
- AidIQ
- Asian Disaster Preparedness Center (ADPC)
- Sahana Taiwan
- iWay
- Trinity College
- North Carolina State University (NCSU)
- Rensselaer Polytechnic Institute (RPI)
- University of Wisconsin
- CrisisCommons

SahanaCamps



- 1.0 Delhi, India – July 2010
- 1.1 Taipei, Taiwan – August 2010
- 1.2 Hanoi, Vietnam – November 2010
- Indonesia?
- Thailand?
- Africa?





SahanaCamp 1.2- Hanoi. IBM's Offices.



Google Student Programs

Get paid to work with Sahana!

- Google Summer of Code

- University Students
- May-August
- \$5000

- Google Code In

- High School Students
- November – January
- Up to \$500





Tomorrow's Workshop

- Learn how to use Sahana Eden
- Install a Development Environment for Sahana Eden
- Help with Testing
- Translation to Vietnamese
- Experimenting with prototype designs for Sahana.