



Sahana

Free & Open Source Software for Humanitarian Assistance and Disaster Management

*“No innovation matters more
than that which saves lives”*

Avelino J. Cruz, Jr., Secretary of National Defence of the Philippines
on the use of Sahana following disastrous mudslides in 2005



Sahana

What is Sahana?

- A free & open source portable web tool
- Modules designed to address common Disaster Management problems
- A Rapid Application Development (RAD) platform

Main Goals

- Bring efficiencies to disaster response coordination
- Facilitate effective information exchange between responders and beneficiaries
- Primary focus is to help victims






The Historic Trigger: 12/26/04 Indian Ocean Tsunami

- At least **226,000** dead
- 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






Sahana first deployed by Sri Lanka following tsunami




CENTRE FOR NATIONAL OPERATIONS
ජාතික මෙහෙයුම් මධ්‍යස්ථානය
தேசிய நடவடிக்கை மத்திய நிலையம்



CNO Data Center

Click [here](#) for the CNO Homepage.



Welcome to Sahana, a web application that hosts a number of services for the needy and for those who want to assist in easing the burden of those affected by the recent tsunami.

If you are not a registered organization/user please **register** to start using the facilities provided through Sahana.

- » **Sahana Organization Registry**
- » **Sahana Request Management System**
- » **Sahana People Registry**
- » **Sahana Camp Registry**
- » **Sahana Assistance Database**

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Software Developed Collaboratively by the Sri Lankan ICT Industry. Contributors include (in alphabetical order): Eurocenter, Finder2000, hSenid, IFS, JKCS, LKLUG, LSF, UCSC, Univ. of Moratuwa, and Virtusa. This effort was coordinated by ICTA.

Server donated by IBM and hosted by Sri Lanka Telecom.



Sahana Core Modules

- Organization Registry
 - Maintains data (contact, services, etc) of groups, organizations and volunteers responding to the disaster
- Missing Persons / Disaster Victim Registry
 - Helps track and find missing, deceased, injured and displaced people and families

The screenshot shows the SAHANA Disaster Management System interface. The main heading is "Organization Registration". Below the heading, it states "Fields marked with * are required (entry is compulsory)". The form includes several fields: "* Organization Name:" (text input), "* Organization Type:" (dropdown menu with "Government" selected), "* Services Provided:" (checkboxes for Agriculture, Area Development, Communications, and Disaster Preparation), and a "Base Location Information" section with "* Country of Origin:" (dropdown menu with "Sri Lanka" selected), "Registration Number:" (text input), "* Province:" (dropdown menu with "Western" selected), and "* District:" (dropdown menu with "Colombo" selected).

The screenshot shows the CNO (Centre for National Operations) "Report a Missing Person" form. It features a search bar at the top with the text "Search for people!". Below the search bar, there are links for "Sahana home page", "People registry home page", "Report a missing person", and "Important links Confused? See the FAQ". The form includes a list of instructions: "Please enter all available details of the person", "All fields below are optional", and "If you need assistance please call this hotline xxx-xxxx-xxx". The form fields include: "Name:" (text input), "Other names:" (text input), "Gender:" (dropdown menu with "Unknown" selected), "Date of birth (yyyy-mm-dd):" (text input), "Age:" (text input) OR "Unknown" (dropdown menu), "Image:" (text input) with a "Browse..." button, and "National ID number:" (text input).



Sahana Core Modules

- Request Management
 - Tracks all requests and helps match pledges for support, aid and supplies to fulfilment

SAHANA
Disaster Management System

Jump to: [Content](#) | [Module Menu](#)

RMS MODULE ACTIONS

- Home
- Requests
 - New Request
 - List All Requests
 - Search Requests
- Pledges
 - Add Pledges
 - View Pledge
 - List Pledges

SAHANA MAIN

- Sahana Home
- Camps Registry
- GIS Mapping
- Missing Person Registry
- Organization Registry
- Request Management System
- System Administration

Login

Request Management System

New Request

Request Date: 2006-05-06

Requester Name: chamindra

Requester Contact: 07778838322232

Requester Address:

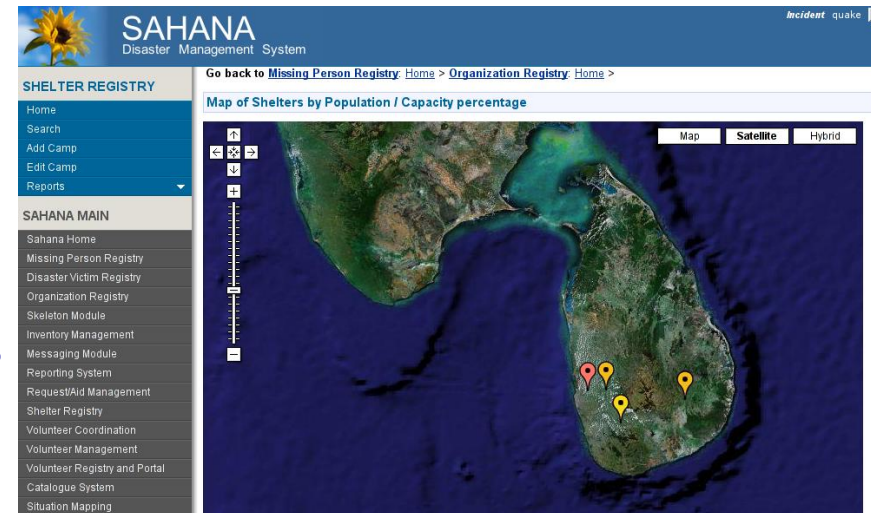
Site Name:

Site District: Colombo

Site Address:

Comments:

- Location Registry
 - Tracks data on all important places to the disaster response, such as temporary shelters and medical facilities





Sahana Functionality Overview

- Situation Awareness
 - Geospatial Database
 - Situation Mapping
 - Charts & Reporting
- Person Management
 - Person Database
 - Victim Tracking & Tracing
 - Disaster Victim Identification
 - Missing Persons Registry
 - Biosurveillance
- Aid Management
 - Organization Registry
 - Shelter Registry
 - Request Management
- Resource Management
 - Volunteer Management
 - Project Management
 - Logistics Management
 - Inventory Management
 - Hospital Management
 - Food Aid Request Portal
 - Aid Catalogue
- Communication & Alerting
 - E-mail & SMS
 - Integration with Situation Mapping
 - Alerting System (CAP)
 - Alert Aggregation



Major Sahana Disaster Deployments

- Flooding in **Pakistan** – 2010
- Flooding in **Guatemala** – 2010
- Earthquake in **Chile** – 2010
- Earthquake in **Haiti** – 2010
- National Coordinating Agency for Disaster Management (BNPB) in **Indonesia** – 2009
- National Disaster Coordinating Council in **Philippines** – 2009
- Cyclone Nargis in **Myanmar** – 2008
- Chengdu-Sizuan Province Earthquake, **China** – 2008
- Bihar Floods, **India** – 2008
- Ica Earthquake, **Peru** – 2007
- Cyclone Sidr in **Bangladesh** – 2007
- Yogyakarta Earthquake, **Indonesia** – 2006
- Landslides in the **Philippines** – 2005
- Kashmir Earthquake in **Pakistan** – 2005
- Indian Ocean Tsunami in **Sri Lanka** – 2005



Other Ongoing Sahana Deployments: Recovery, Mitigation, Preparedness

- Vietnam – 2010
- Taiwan - 2010
- UN ISDR Asia Partnership, Disaster Risk Reduction Portal, Bangkok, Thailand – 2010
- Ministry of Rehabilitation, Sri Lanka – 2010
- Bethesda Hospitals Emergency Preparedness Partnership, National Library of Medicine, Bethesda, Maryland - 2009
- National Disaster Management Center & Ministry of Resettlement & Disaster Relief Services, Sri Lanka – 2009
- LirneAsia, Bio-Surveilliance, Sri Lanka and India - 2008
- Sarvodaya (NGO), Sri Lanka – 2008
- Coastal Storm Plan in New York City – 2007

Sahana Software has been downloaded over 25,000 times



The Sahana Community

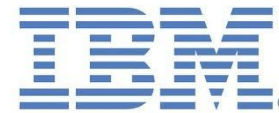
- A global voluntary team of developers and experts including:
 - Emergency Managers
 - Relief Workers
 - ICT Specialists and Researchers
 - Experienced FOSS developers
 - Humanitarian Activists
 - Nurses and other Public Health Experts



Global collaboration for
the global public good



H-FOSS Technology Partners



World Food Programme





Sahana FOSS Projects

- Two technical and one coordination project:
 - Sahana Agasti (PHP) – LGPL v.3
 - Sahana Eden (Web2Py) – MIT License
 - Sahana Standards and Interoperability
- Codebase hosted on Launchpad
 - <http://www.launchpad.net/Sahana>
 - Wiki: <http://wiki.sahanafoundation.org>



Sahana

A Global Free and Open Source Project



Freedom to use, analyze, modify and re-distribute

Available for everybody at no cost

Open for research and development

Collaboratively developed by a **Global** community

Mark Prutsalis, President & CEO

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@SahanaFOSS #Sahana

<http://www.slideshare.net/SahanaFOSS>