

Open Source Disaster Management Software Platform

## Why Should You Use Sahana Eden?

Sahana Eden is an open source software platform which has been built specifically to help in Disaster Management. It is highly configurable so that it can be used in a wide variety of different contexts and is also easy to modify to build custom solutions. Different levels of support are available from both the voluntary Sahana Eden community and professional companies.



## Built for Disaster Management

Sahana Software was initially developed by members of the information technology (IT) community in Sri Lanka to provide solutions for the relief effort following the 2004 Indian Ocean Tsunami. Sahana Eden is the latest evolution of this software and provides a solution to manage the organizations, people, projects, inventory and assets as well as collecting information through assessments and providing situational awareness through maps.

Sahana Eden can be accessed from the web or locally from a flash drive, allowing it to be used in environments with poor internet. Local & Web versions can be configured to synchronize to allow data to be shared between them.

These features are designed to help Disaster Management practitioners to better mitigate, prepare for, respond to and recover from disasters more effectively and efficiently. Sahana Eden can provide valuable solutions for practitioners in Emergency Management, Humanitarian Relief and Social Development domains.

## Community and Professional Support

Sahana Eden is a project of the Sahana Software Foundation, whose mission is:

To help alleviate human suffering by giving emergency managers, disaster response professionals and communities access to the information that they need to better prepare for and respond to disasters through the development and promotion of free and open source software and open standards.

The project is supported by a voluntary community of Disaster Management practitioners, students, academics and companies. This community is able to provide a basic level of support to help you deploy and configure Sahana Eden. There are also companies, such as AidIQ, who provide professional services to customize and support Sahana Eden.

# Highly Configurable and Easy To Modify

Sahana Eden is designed to be rapidly configured and customized to support the diverse business processes used within Disaster Management. Sahana Eden's modular design allows different pieces of functionality to be enabled and disabled as required providing flexible solutions for changing contexts.

The application can be configured to secure sensitive information, while also making data which needs to be shared available in a variety of different formats including Microsoft Excel and PDF. To ensure that Sahana Eden is accessible to every country, it can be translated into multiple languages.

Finally, Sahana Eden is licensed under the Open Source MIT License (http://www.opensource.org/licenses/mit-license.php), making it free to download, customize and modify without any restriction to rely on any single vendor. The MIT License also places no restriction on the commercial or closed deployments of the software, giving the greatest flexibility for the use of Sahana Eden in sensitive environments.

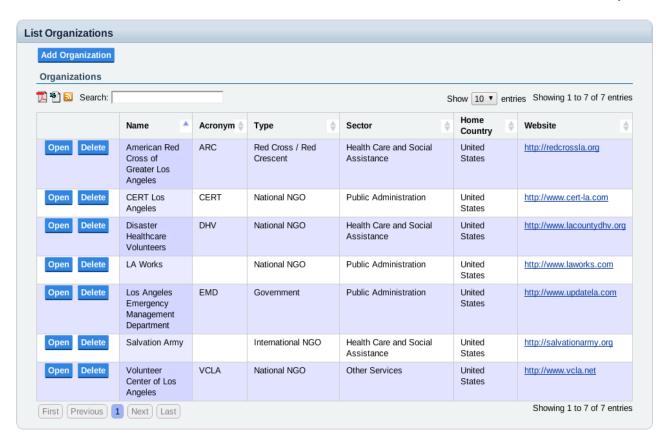
#### What Does Sahana Eden Do?

Sahana Eden contains a number of different modules which can be configured to provide a wide range of functionality. This chapter gives a brief summary of the core modules and outlines how Sahana Eden can meet some of your needs.

## Organization Registry

Many diverse organizations are involved in Disaster Management, from responding to disasters to strengthening communities to providing support to people in need. Sahana Eden's Organization Registry can track what organizations are active in different contexts, providing opportunities for collaboration and coordination. After the 2010 earthquake in Haiti, Sahana Eden managed a list of 696 organizations who were all providing assistance to the affected population. This included Government Departments, Non-Government Organizations (NGO), United Nations (UN) Agencies and Corporations.

The Organization Registry also allows organizations to record their Offices, Warehouse and Field Sites including their locations so they can be mapped as well as links to other modules such as Human Resources, Assets and Inventory.



### **Project Tracking**

By telling you Who's Doing What, Where, and When, Sahana Eden provides a valuable tool to help organizations responding to disasters know where the greatest needs are and coordinate with others who are engaged in similar work.

The Disaster Risk Reduction (DRR) DRR Project Portal (www.drrprojects.net) uses Sahana Eden to provide a coalition of organizations a platform to share information on what projects they are engaged in within the Asia Pacific region. There is now information on 881 projects which is publicly available to communities, stakeholders and decision makers to facilitate cooperation and planning and to identify gaps and overlaps.

^	Climate Change	Complex Emergency	Early Warning	Environment	GIS & Mapping	Recovery \$	Total 🌲
Cambodia	15 🛖	<ul> <li>United Nations         Economic and         Social         Commission         for Asia and         the Pacific</li> <li>United Nations         Office for the         Coordination of         Humanitarian         Affairs</li> <li>Mekong River         Commission</li> </ul>	14 🛖	<ul> <li>United         Nations         Economic         and Social         Commission         for Asia and         the Pacific</li> <li>Mekong         River         Commission</li> <li>Korea         International         Cooperation         Agency</li> <li>World Bank</li> </ul>	10 🛖	5 🛟	25 🛖
Lao People's Democratic Republic	12 😛	3 😛	13 😛	6 😛	9 😛	5 😛	19 😛
Thailand	15 😛	3 😛	14 😛	10 😛	7 😛	7 😛	24 🕕
Viet Nam	18 😛	3 😛	18 😛	7 😛	11 😛	6 😛	30 😛
Total	28 🜐	3 🜐	25 🜐	13 🜐	14 🜐	12 🜐	

## Messaging

In the complex domain of Disaster Management communication is critical. Sahana Eden provides support for messages to be sent by Email, SMS, Twitter and Google Talk. Distribution Groups can be set up to allow messages to be easily sent to many people at once. Users are able to search for specific information and subscribe to receive update messages when new information is added.

Interactive messages can also be set up to allow people to send short message queries to Sahana Eden and receive automatic responses.

#### Scenarios & Events

To help organizations better plan for disasters Sahana Eden can be used to plan for different scenarios, including recording what human resources, assets, facilities and tasks will be needed to effectively respond.

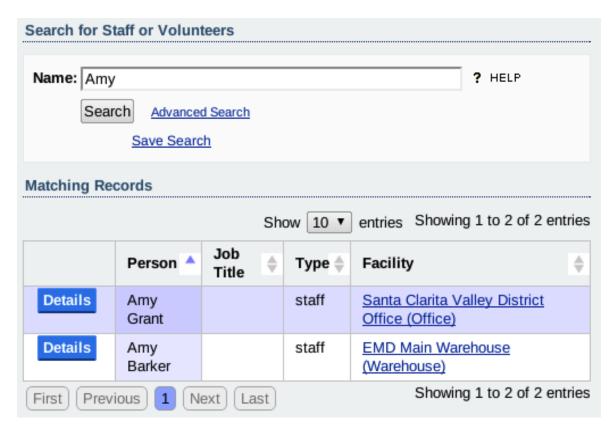
When an incident occurs events can be created from a scenario template to allocate the resources and alert people of the need to respond.

#### **Human Resources**

The most important part of Disaster Management is the people. Whether they are community volunteers or staff working for different organizations, the Human Resources module can help manage the people involved. It will track where they are, what skills they have and help ensure that everyone is effectively engaged with the work that needs to be done.

Sahana Eden can also be used to provide a contact list to ensure that the right people can be contacted at the right time.

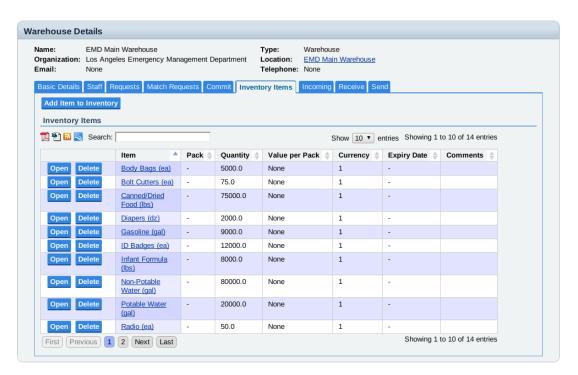
The Portuguese Volunteer Firefighters use Sahana Eden to help manage their various teams including tracking their experience, training and evaluations as a solution for managing credentialing of their volunteers.



### Inventory

Whether organizations are supplying basic essentials of life to people affected by natural disasters or giving communities the tools they need to restore their livelihoods, Sahana Eden can be used to manage inventories of items and match requests for items with warehouses and other facilities which have them available. Operationally, Sahana Eden can be used to record and automate transactions for sending and receiving shipments. Sahana Eden can support multiple Catalogs of Items as well as providing alternative items to ensure more effective use of supplies. Sahana Eden can be configured to automatically load both a generic list of items and/or the IFRC Emergency Item Catalog.

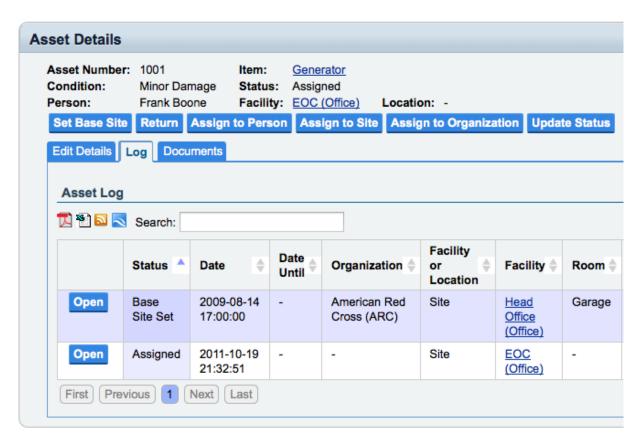
The HELIOS Foundation is utilizing Sahana Eden to allow different Humanitarian NGOs to share inventory information to improve operational efficiency by facilitating the utilization of surplus items and coordinating procurement of new items.



#### **Assets**

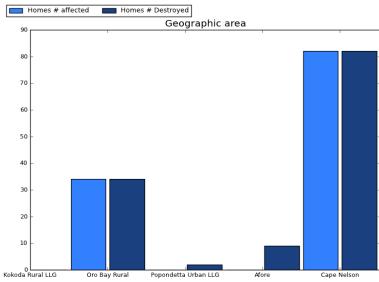
A wide range of assets are needed to respond to disasters, including vehicles to transport people and relief items, radio equipment to provide communication where telecommunication infrastructure has been destroyed, and generators to provide backup power. Sahana Eden is able to manage assets, track where they are, who they have been assigned to, and what condition they are in. This ensures that assets are used effectively and efficiently.

The Resource Mapping System was deployed by the International Federation of Red Cross and Red Crescent Societies (IFRC) using Sahana Eden to provide visibility on the assets of national Red Cross and Red Crescent Societies. This prepares the Red Cross movement to respond more effectively to disasters with the assets they need.



#### Assessments

Sahana Eden can be used to collect Homes # affected analyze information from assessments to help organizations more effectively plan their disaster management activities. Different assessment templates can easily be designed and imported into Sahana Eden to support for different assessments organizations in different contexts. Data can either be entered into an interactive web form or imported via an Excel template.



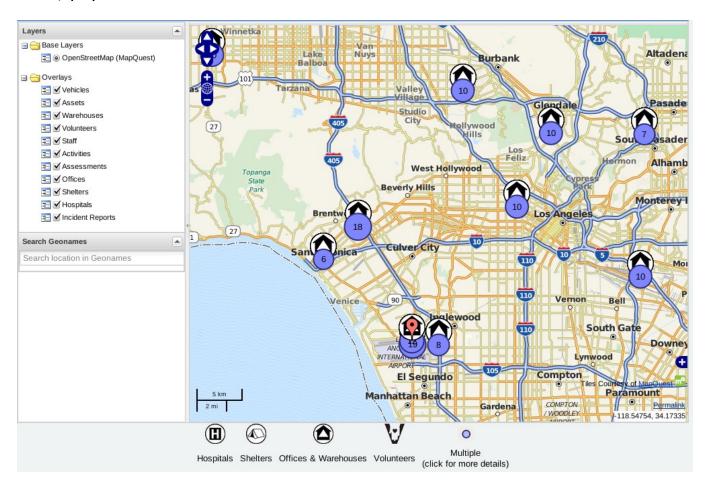
In order to help decision makers effectively use the information collected in assessments, Sahana Eden provides a range of analysis including custom reports, graphs and maps.

## Map

"Some people need to see a map before they can even start having a conversation about the data."

- Sahana Eden User

Sahana Eden has fully integrated mapping functionality which allows any location-based data to be visualized on a map. This information can also be searched using a map-based boundary selection. Maps provide situational awareness which is essential when either planning to prepare for or respond to a disaster. Sahana Eden supports many standard formats for overlaying data on maps from other sources and Geographical Information Systems (GIS), for example natural hazard risks, population or weather.



#### For more information, visit:

http://SahanaFoundation.org Or http://eden.SahanaFoundation.org