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An Interactive Web Information Management System (IMS) for Managing Water Information

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An Interactive Web Information Management System (IMS) for Managing Water Information

Prepared for WAWASH Information and Knowledge Management

Jennifer Fu

Florida International University GIS Center

Projects & Knowledge Management
System Core Function

Content Management System (CMS)
Web application to create, store, and manage site contents.

Site Information
(Introduction, Services, Staff, Partners)

News & Events

Contact Form

Blog

Social Media Support

Project & Work Flow Management
Application to management the progress and status of the project

Projects List & Search (Multi)

Project Summary

- Locations
- Project Plan
- Goals
- Background
- Sustainability
- Project Progress by Focus Areas & Indicators

Project Reporting

- Indicators reporting by Focus Areas & Locations
- Status Reports

Survey Data Collection

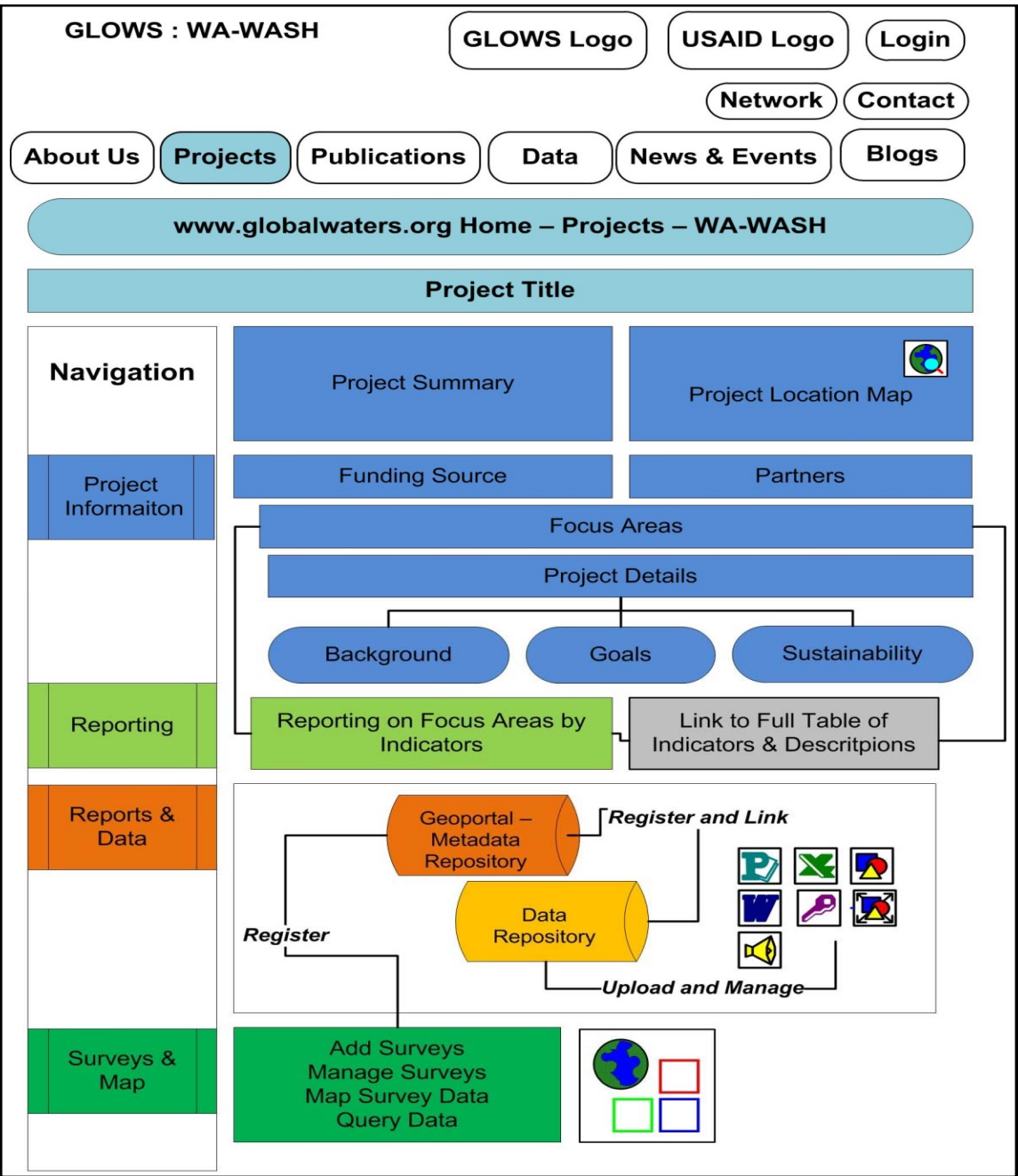
- Survey List with data filter
- Interactive map for survey data
- Survey data entry with customized templates (Water Source, Education Facility, Health Facility, General Facility, Hygiene, Gender Capacity)
- Online survey data editing
- Survey data QA & QC tools

Data & Publication
Data preservation module. Reports, publications, data and other project generated documents will be store and can be retrieved here.

Keywords, facet search, spatial search against metadata engine

Search Results List with interactive map interface

Navigation from search result to stored data in digital collection repository



West Africa Water Sanitation and Hygiene Program (WA-WASH)





Main page of Project Lists

[ABOUT](#)[PROJECTS](#)[PUBLICATIONS & DATA](#)[NEWS & EVENTS](#)[BLOG](#)[CONTACT](#)

ALL PROJECTS



Title	Location	Partners	Focus area	Funding
 <p data-bbox="247 885 1071 950">West Africa Water Sanitation and Hygiene Program (WA-WASH)</p> <p data-bbox="247 958 1113 1071">The primary goal of the West African Water, Sanitation Hygiene Program (WA-WASH) is to increase – by building on and expanding past West African Water Initiative (WAWI) efforts in the region- sustainable access to safe water and sanitation, and improve hygiene in West Africa.</p>	Ghana, Africa Burkina Faso, Africa Niger, Africa		Capacity Building Climate Change Vulnerability and Adaptation Education Gender Health Hygiene Sanitation Social Water	
<p data-bbox="247 1242 976 1282">Other Water Sanitation and Hygiene Program</p> <p data-bbox="121 1299 241 1315">(OTHER PROJECTS)</p>	Tanzania, Africa			





Project Details

Project plan

Activity 1.1 Conduct stakeholders meetings;
 Activity 1.2 Build ing capacity of area development committee (ADC), and community members to act on modern family planning;
 Activity 1.3 Training of 88 faith-based counselors on modern family planning.

Goals

To increase women using health care facilities for skilled delivery and reproductive health care on time.

Background

Malawi has one of the highest rates of maternal mortality in sub-Saharan Africa with 675 deaths per 100,000 live births and remains off-track to achieving Millennium Development Goal (MDG) 5 by 2015 . A major underlying cause is the unmet need for contraception at 26.1%, leading to avoidable pregnancy-related morbidity and mortality associated to unplanned births and unsafe abortion . This situation is both unacceptable and preventable.

Sustainability

The Nkhoma Safe Motherhood program has been successful and will continue to build local capacity to carry out the activities. Cross sections of the community, government and NGO partners have been and will continue to be involved in the planning, implementation, and monitoring and evaluation of the program. There

Area of Focus Funding & Partners File List

File Title	Upload Date	Upload By
test	09/20/13	mengm
quartlyReport	09/17/13	mengm
annual report	09/17/13	mengm
fieldDataMay2013	06/14/13	test
hospital sanitation report	06/14/13	test
wellDistributionSurvey	06/13/13	user1

Page 1 of 1 | Displaying items 1 - 6 of 6



Indicators Reporting

Capacity Building	WA-WASH - Ghana	WA-WASH - Burkina Faso	WA-WASH - Niger	
Climate Change Vulnerability and Adaptation	ID	Indicator	Status	Files
Education	47	Amount of micro financing leverage/available for business development services	56 / 100	4 Files
Gender	48	Number of people receiving training in global climate change as a result of USG assistance	30 / 100	0 Files
Health	49	Percentage of investigated organizations with capacity gaps identified at the national level	85 / 100	1 Files
Hygiene	50	Percentage of organizations with capacity gaps identified at regional level	13 / 100	0 Files
Sanitation	51	Percent of communities with sustainable WASH as a result of USG assistance	25 / 100	0 Files
Social				
Water				

About Indicator Reporting
Authenticated log in required for updating or uploading to Indicators

Status Reports

Reports	Create By	Create Time
wellDistributionSurvey	user1	6/13/2013 12:00:00 AM

About Status Reports
Authenticated log in required for uploading Reports.



All projects / West Africa Water Sanitation a

Project Summary **Project Reporting**

Indicators Reporting

Status Reports

Reports

- wellDistributionSurvey
- hospital sanitation report
- fieldDataMay2013
- annual report
- quartlyReport
- test

Upload Reports

Choose Location: WA-WASH-Ghana

Title: WIS Presentation

Type: Text

West (W): -80.430908203125

East (E): -80.0299072265625

North (N): 26.077671841574777

South (S): 25.702092831796044

Bounding Box

Select files...

or

Drop your files here to upload

DPanther Location Picker

Miami, FL Find Address

Map Satellite

Map showing Miami, FL area with a bounding box and a red location pin.

Save Close

Add New Survey

Survey List (Click header to collapse)

SurveyType	UserCreated	Country	Location	Create Date	Status
WaterSource	guanb	Niger	Burkina	09/23/13	Approved
Hygiene	mengm	Ghana	Nouna	09/20/13	Pending
Hygiene	mengm	Burkina Faso	Gassan	09/19/13	Approved
WaterSource	mengm	Ghana	Ejura	09/19/13	Pending
Hygiene	mengm	Ghana	Florianopolitan	09/19/13	Initial
WaterSource	mengm	Ghana	Tougan	09/18/13	Approved
WaterSource	user2	Ghana	test	09/09/13	Rejected
WaterSource	user2	Ghana	Gassan	08/27/13	Approved
WaterSource	guanb	Burkina Faso	test	08/27/13	Pending
WaterSource	mengm	Ghana	Ye Dept	06/27/13	Approved
WaterSource	mengm	Ghana	Ziniare	05/21/13	Initial
Hygiene	mengm	Burkina Faso	Laye Dept	05/20/13	Pending
Hygiene	mengm	Burkina Faso	Ziga	05/20/13	Pending
Hygiene	mengm	Ghana	Sabou	05/20/13	Approved
Hygiene	mengm	Ghana	Ejura	05/20/13	Initial
GeneralFacility	mengm	Burkina Faso	Dedougou	05/20/13	Pending
GeneralFacility	user2	Burkina Faso	Gossina Dept	05/20/13	Pending
GeneralFacility	user2	Burkina Faso	Laye Dept	05/20/13	Initial
GenderCapacity	mengm	Ghana	Zamo	05/19/13	Initial
GenderCapacity	mengm	Burkina Faso	Gassan	05/19/13	Pending
GeneralFacility	mengm	Burkina Faso	Laye Dept	05/19/13	Initial
GenderCapacity	mengm	Burkina Faso	Yako	05/19/13	Initial
Hygiene	user1	Burkina Faso	Bana Dept	05/19/13	Approved

Field Survey

The image shows a satellite map interface for field survey. A green box at the top left contains the text "Field Survey". In the top right corner, there are "Map" and "Satellite" buttons. The map displays various geographical features, including roads (R20, R2) and department names (Tou Dept, Kirsi Dept, Rouko Dept, Bousse Dept, Ziniare, Absouya Dept, Kombissiri, Singdin, Pompoi Dept). A red circle highlights a location marker on the map, which is linked to a data popup window. The popup window contains the following information:

locName	Florianopolitan
x	12.608176128810893
y	-1.285400390625
ele	150
hygieneHandWashing	0

Field Survey



Add New Survey

Select Survey Type: Hygiene

Contry Name: Burkina Faso

Location/Village Name: **Kombissiri**

LAT(DD): 12.070744399999999

LON(DD): -1.3373708500000703

ELE(M):

Hygiene: Is there water available for hand washing? (Yes/no) Yes No

Add

DPanther Location Picker

Kombissiri Find Address



Field Survey



Add New Survey

Survey List (Click header to collapse)

SurveyType	UserCreated	Country	Location	Create Date	Status			
Hygiene	fujen	Ghana	Kombissiri	10/14/13	Initial	+	+	+
WaterSource	guanb	Niger	Burkina	09/23/13	Approved	+	+	+
Hygiene	mengm	Ghana	Nouna	09/20/13	Pending	+	+	+
Hygiene	mengm	Burkina Faso	Gassan	09/19/13	Approved	+	+	+
WaterSource	mengm	Ghana	Ejura	09/19/13	Pending	+	+	+
Hygiene	mengm	Ghana	Florianopol...	09/19/13	Initial	+	+	+
WaterSource	mengm	Ghana	Tougan	09/18/13	Approved	+	+	+
WaterSource	user2	Ghana	test	09/09/13	Rejected	+	+	+
WaterSource	user2	Ghana	Gassan	08/27/13	Approved	+	+	+
WaterSource	guanb	Burkina Faso	test	08/27/13	Pending	+	+	+
WaterSource	mengm	Ghana	Ye Dept	06/27/13	Approved	+	+	+
WaterSource	mengm	Ghana	Ziniare	05/21/13	Initial	+	+	+
Hygiene	mengm	Burkina Faso	Laye Dept	05/20/13	Pending	+	+	+
Hygiene	mengm	Burkina Faso	Ziga	05/20/13	Pending	+	+	+
Hygiene	mengm	Ghana	Sabou	05/20/13	Approved	+	+	+
Hygiene	mengm	Ghana	Ejura	05/20/13	Initial	+	+	+
GeneralFac...	mengm	Burkina Faso	Dedougou	05/20/13	Pending	+	+	+
GeneralFac...	user2	Burkina Faso	Gossina Dept	05/20/13	Pending	+	+	+
GeneralFac...	user2	Burkina Faso	Laye Dept	05/20/13	Initial	+	+	+
GenderCap...	mengm	Ghana	Zamo	05/19/13	Initial	+	+	+

Map Satellite

locName: Kombissiri

x	12.070744399999999
y	-1.3373708500000703
ele	
hygieneHandWashing	1



Publications & Data



Mara Basin Water Quality 2005

Identification Information


File
Identifier: m_waterqualityI_mara.xml
Title: Mara Basin Water Quality 2005
Publication Date: 2006-04-10

Abstract: The map shows the gauging stations for the water quality sampling that was done in 2005 as well as the locations of the populated places, rivers, roads, waterbodies, subwatersheds, the Mara wetland, the national boundaries and the elevation for the Mara Basin region at a 1:600,000 scale. Including in the map is graphics depicting various water quality data for the stations including temperature, pH, EC, TDS, salinity, TDN, DOC, TDP, Phosphate, and N:P.

Service URL: ftp://gisrftp.fiu.edu/Africa/m_waterqualityI_mara.zip

Spatial Domain

West Bounding Longitude: 33.473352193
South Bounding Latitude: 33.473352193
East Bounding Longitude: 33.473352193
North Bounding Latitude: 33.473352193





Credits

Project Team: Boyuan Guan, Meng Ma, Daniel Kirsch, Daniel Gann

Funding Partners: USAID via WAWASH

Florida International University GIS Center