2014 GSDI Small Grant Project Final Report

Title of Project/Activity

Towards GIS Interoperability For Environmental Protection And Sustainable Development

Focal Point Institution

Makerere University, Kampala P.O Box 7062, kampala Uganda, East Africa

Contact Person (business street address, phone/fax, email, and website)

Dr. Anthony GIDUDU agidudu@cedat.mak.ac.ug College of Engineering Design Art and Technology Department of Geomatics and Land management Makerere University, Kampala, P.O Box 7062, Kampala

List of Collaborators (Contact Information)

Name	Role
Makerere University, department of Geomatics	Dr. Anthony GIDUDU
and Land Management	agidudu@cedat.mak.ac.ug
	Department of Geomatics and Land Management
	College of Engineering Design Art and Technology
	Makerere University, Kampala,
	P.O Box 7062, Kampala, UGANDA
Uganda Bureau of Statistics	Muhwezi Bernard
	Head Geoinformation department
	Uganda Bureau of Statistics,
	Plot 9, Colville Street
	Statistics House, Fl 5, Rm 5.4
	P.O. Box 7186
	Kampala
	Uganda
	+256711706037
National Planning Authority	Ongora Emmanuel
	ongoremmanuel@gmail.com
	Plot 17, Hannington Road, 4th Floor, Short Tower,
	Crested Towers Building/P.O. Box 21434 Kintu
	Road (Siad Barre) Ave, Kampala, Uganda
	+256 256414250212

Summary of Deliverables as per Grant Proposal

- Project report (Including an annex and presentation slides attached separately)
- Scientific Paper to be compiled and submitted to conference in August
 Geoportal with ISO 19115 compliant Metadata documentation
- <u>http://196.43.134.8:8080/geoportal/catalog/main/home.page</u>
 Geographic services (WFS, WMS, WCS)
- http://196.43.134.8:2292/geoserver/web/

Note: The portal is still on intranet until January when the university will put it on internet (pending university bureaucratic process). As soon as it is available, details will be availed to you

Activity	Man- days	Cost per Man day	Persons	Total Cost
Project Initiation Meeting	5	10	Dr. Anthony Gidudu & Mr. Allan Mazimwe	100
Identification of data sources	10	10	Dr. Anthony Gidudu & Mr. Allan Mazimwe	200
Data collection and validation	10	10	Mr. John Kakala, Mr. Victor Muhumuza & Mr. Elijah Sekittp	300
Metadata documentation	20	15	Dr. Anthony Gidudu & Mr. Allan Mazimwe	600
Geoportal Development	30	15	Dr. Anthony Gidudu & Mr. Allan Mazimwe	900
Stakeholder meeting	2	20	Mr. Allan Mazimwe	40
Report Compilation	5	20	Mr. Allan Mazimwe	100
Report Submission	1	20	Dr. Anthony Gidudu	20
Additional Expenses	·		· · ·	
Stationary				190
Total				2450

Itemized Use of Project's Budget (including summary of labor hours)

Our Contribution: \$900 for purchase of server hosting the Geoportal

Timeline of the Project

Activity	Μ	J	J	Α	S	0	Ν	D	Results	Personnel
Project Initiation Meeting									 Signing of contract Discussion and agreement of timelines 	Dr. Anthony GiduduMr. Allan Mazimwe
Identification of data sources										• Mr. Allan Mazimwe
Data collection and validation									Collection of preliminary datasets	• Volunteers
Metadata documentation									• ISO 19115 complient datasets	Dr. Anthony GiduduMr. Allan Mazimwe
Geoportal Development									Metadata and spatial data publication	 Mr. Victor Muhumuza Mr. John Kakala Elijah Ssekito
Stakeholder meeting									• Feedback on presented Geoportal	• Mr. Allan Mazimwe
Report Compilation									Draft report	Dr. Anthony GiduduMr. Allan Mazimwe
Report Submission									Final report	• Dr. Anthony Gidudu

Report - 2014 GSDI Small Grant Agreement 30-Uganda-MakerereUniv II.docx

Potential or Actual Follow-up Activities

Going forward, we hope to

- Increase on the datasets
- Train users on how they can make use of the portal and add more information

Unanticipated obstacles you encountered

- Data validation is a huge challenge as there are different datasets of the same phenomenon
- Several institutions had poor quality data thus necessitating much longer data cleaning and validation
- We didn't anticipate that it would take this long to have the Geoportal approved for hosting at the university. If this continues we will have to explore its hosting at one of the collaborating institutions
- From the user meeting, one of the key issues that came out was the need to develop a policy paper to guide government on developing a policy to guide sharing/usage of SDIs.

Do you think you have reached your goal?

Thanks to GSDI support, we have achieved our goal. We hope to build up on this support to further establish SDI research and usage in Uganda

Appendix

Photos, maps, graphics, or illustrations of project activities

Include in the report or as attachments in .jpg format

→ C [] 196.43.134.8				
		- Louis D	egister Help About Feedback	
	Geoportal	ersey C r Carbon Login	egister Help About Feedback	
	State of the second state	PLOT THE	-4 Studies	
	HOME SEARCH BROWSE		LAUNCH MAP VIEWER	
	Home			
	The Geoportal provides easy and convenient	ways to share geospatial data. All	it takes is just 3 simple	
	steps.			
	You can simply	You can do more		
	Find Data	Be a User	Share Data	
	Search	Create an Account	Create Metadata	
	Search Data	Save your Searches	Upload your Data	
	Download Data		Publish Data	
	This Geoportal was funded under the GSDI s	mall grants . Please read the Disclaimer and Pr	ivacy or Contact Us.	
7 unread) - allanmazin 🗙	🚱 Geoportal 🗙 🌾 Geoportal 🗙 📢	GeoServer: Welcome ×		
	8:8080/geoportal/catalog/search/search.page	Geoseivei, welcome		(Lancent)
C 190.45.154.0	Search			
	Text:			
		Expand results Zoom To Re	2 🔁 Last sults Zoom To Searched Area	
	Text: Sea	 Expand results Zoom To Re Geodata for Uganda 	sults Zoom To Searched Area	
	Text: Sea	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera 	Splus most of the SLD extension te PDF, SVG, KML, GeoRSS Also has	
	Text: Sea	Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera reference implementation of WF5 1	sults Zoom To Searched Area S plus most of the SLD extension te PDF, SVG, KML, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS	
	Text: Sea	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera 	Splus most of the SLD extension be PDF, SVG, KML, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl	
	Text: Sea	Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Metad	Splus most of the SLD extension be PDF, SVG, KML, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl	
	Text: Sea	Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera reference implementation of WFS operations including Transaction. a Open Preview Details Metad Wetlands of Uganda	Splus most of the SLD extension be PDF, SVG, KML, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl	
	Text: Sea	Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Metaid Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide.	sults Zoom To Searched Area 5 plus most of the SLD extension te PDF, SVG, KML, GeoRS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl ata Zoom To wetlands in uganda classified according	
	Text: Sea Records shown from: This Site Cick here to relect different site or configure search. Additional Options Clear WHEN Intersecting Fully within Start Date: (yyyy-mm-dd) End Date: (yyyy-mm-dd) WHERE	Expand results Zoom To Re <u>Coom</u> Coom To Re <u>Coom</u> Coom To Re <u>Coom</u> Coom To Re Coom To Result A compliant implementation of WFS 1 operations including Transaction.a <u>Open Preview Details Metad</u> <u>Compen Stands of Uganda</u> this is a wetlands shape file for all	sults Zoom To Searched Area 5 plus most of the SLD extension te PDF, SVG, KML, GeoRS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl ata Zoom To wetlands in uganda classified according	
	Text: See	Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Metad details of Uganda this is a wetlands shape file for all to cover types. this data is provide wetland Information System) Details Metadata Zoom To	sults Zoom To Searched Area 5 plus most of the SLD extension te PDF, SVG, KML, GeoRS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl ata Zoom To wetlands in uganda classified according	
	Text: Sea Records shown from: This Site Cick here to relect different site or configure search. Additional Options Clear WHEN Intersecting Fully within Start Date: (yyyy-mm-dd) End Date: (yyyy-mm-dd) WHERE	Expand results Zoom To Re Cook and the second sec	sults Zoom To Searched Area 5 plus most of the SLD extension te PDF, SVG, KML, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl ata Zoom To wetlands in uganda classified according i at the ministry's NWIS (National	
	Text: See	Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Metaid Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide wetland Information System) Details Metadata Zoom To; High resolution quick bird imagery mukono, kampala and entebbe Bar	sults Zoom To Searched Area 5 plus most of the SLD extension te PDF, SVG, KML, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl ata Zoom To wetlands in uganda classified according i at the ministry's NWIS (National	
	Text: See	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic atyling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Metad Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide: wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution quick bird imagery 	Sults Zoom To Searched Area Splus most of the SLD extension te PDF, SVG, KML, GeoRS Also has .0.0 and WFS 1.1.0, supports all WFS and suports impl ata Zoom To wetlands in uganda classified according d at the ministry's NWIS (National	
	Text: See	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera reference implementation of WES operations including Transaction. a Open Preview Details Metad Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution Imagery High resolution and an entebbe Bar Details Metadata Zoom To Protected Areas 	sults Zoom To Searched Area S plus most of the SLD extension te PDF, SVG, KML, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl ata Zoom To wetlands in uganda classified according a the ministry's WWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution	
	Text: See	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Metad Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution quick bird imagery mukono, kampala and entebbe Bar Details Metadata Zoom To Protected Areas Protected Areas in Uganda. Exact of 	sults Zoom To Searched Area S plus most of the SLD extension te PDF, SVG, KML, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl ata Zoom To wetlands in uganda classified according a the ministry's WWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution	
	Text: See	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (a) dynamic styling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Netad Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution Imagery High resolution Imagery Protected Areas Protected Areas in Uganda. Exact on Details Metadata Zoom To 	sults Zoom To Searched Area S plus most of the SLD extension te PDF, SVG, KML, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS nd suports impl ata Zoom To wetlands in uganda classified according a the ministry's WWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution	
	Text: See	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (dynamic styling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Metado Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution quick bird imagery mukono, kampala and entebbe Bar Details Metadata Zoom To Protected Areas Protected Areas Protected Areas auganda. Exact o Details Metadata Zoom To Uganda lakes 	Suits Zoom To Searched Area S plus most of the SLD extension te PDF, SVG, KML, GeeRSS Also has .0.0 and WFS 1.1.0, supports all WFS ind suports impl ata Zoom To wetlands in uganda classified according g at the ministry's NWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution lassification is unknown.	
	Text: See Pecords shown from: This Site Cachere to relead different site or configure search. Additional Options Clear Will Ontersecting Fully within Start Date: (yyyy-mm-dd) Model (yyyy-mm-dd) WHENE Ontersecting Fully within WHENE Ontersecting Fully within WHENE Ontersecting Fully within Text: Image: Ontersecting Fully within Text: Image: Ontersecting Fully within Text: Image: Ontersecting Fully within Image: Ontersecting Fully within Image: Ontersecting Image: Ontersecting Image: Ontersecting Image: Ontersecting <t< td=""><td> Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (a) dynamic styling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Netad Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution Imagery High resolution Imagery Protected Areas Protected Areas in Uganda. Exact on Details Metadata Zoom To </td><td>Suits Zoom To Searched Area S plus most of the SLD extension te PDF, SVG, KML, GeeRSS Also has .0.0 and WFS 1.1.0, supports all WFS ind suports impl ata Zoom To wetlands in uganda classified according g at the ministry's NWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution lassification is unknown.</td><td></td></t<>	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WM (a) dynamic styling). Can also genera reference implementation of WFS 1 operations including Transaction. a Open Preview Details Netad Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution Imagery High resolution Imagery Protected Areas Protected Areas in Uganda. Exact on Details Metadata Zoom To 	Suits Zoom To Searched Area S plus most of the SLD extension te PDF, SVG, KML, GeeRSS Also has .0.0 and WFS 1.1.0, supports all WFS ind suports impl ata Zoom To wetlands in uganda classified according g at the ministry's NWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution lassification is unknown.	
	Text: See	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WRS 1 operations including Transaction. a Open Preview Details Metad Wetlands of Uganda this is a wetlands shape file for all to cover types, this data is provider wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution quick bird imagery mukono, kampala and entebbe Bar Details Metadata Zoom To Protected Areas Protected Areas Protected Areas Polygons defining the outlines of la Details Metadata Zoom To Uganda lakes Polygons defining the outlines of la Details Metadata Zoom To 	Suits Zoom To Searched Area S plus most of the SLD extension te PDF, SVG, KML, GeeRSS Also has .0.0 and WFS 1.1.0, supports all WFS ind suports impl ata Zoom To wetlands in uganda classified according g at the ministry's NWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution lassification is unknown.	
	Text: See Pecords shown from: This Site Cachere to relead different site or configure search. Additional Options Clear Will Ontersecting Fully within Start Date: (yyyy-mm-dd) Model (yyyy-mm-dd) WHENE Ontersecting Fully within WHENE Ontersecting Fully within WHENE Ontersecting Fully within Text: Image: Ontersecting Fully within Text: Image: Ontersecting Fully within Text: Image: Ontersecting Fully within Image: Ontersecting Fully within Image: Ontersecting Image: Ontersecting Image: Ontersecting Image: Ontersecting <t< td=""><td> Expand results Zoom To Re Geodata for Uganda A compliant implementation of WKS 1 operations including Transaction. a Open Preview Details Metad Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide: wetland Information System) Details Metadata Zoom To High resolution quick bird imagery High resolution quick bird imagery mukono, kampala and entebbe Bar Details Metadata Zoom To Protected Areas Protected Areas Protected Areas Protected Areas Poteatia Metadata Zoom To Uganda lakes Polygons defining the outlines of la Details Metadata Zoom To </td><td>Suits Zoom To Searched Area Splus most of the SLD extension te PDF, SVG, KNU, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS ad suports impl atal Zoom To wetlands in uganda classified according d at the ministry's NWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution lassification is unknown. kes</td><td></td></t<>	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WKS 1 operations including Transaction. a Open Preview Details Metad Wetlands of Uganda this is a wetlands shape file for all to cover types. this data is provide: wetland Information System) Details Metadata Zoom To High resolution quick bird imagery High resolution quick bird imagery mukono, kampala and entebbe Bar Details Metadata Zoom To Protected Areas Protected Areas Protected Areas Protected Areas Poteatia Metadata Zoom To Uganda lakes Polygons defining the outlines of la Details Metadata Zoom To 	Suits Zoom To Searched Area Splus most of the SLD extension te PDF, SVG, KNU, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS ad suports impl atal Zoom To wetlands in uganda classified according d at the ministry's NWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution lassification is unknown. kes	
	Text: See Pecords shown from: This Site Cachere to relead different site or configure search. Additional Options Clear Will Ontersecting Fully within Start Date: (yyyy-mm-dd) Model (yyyy-mm-dd) WHENE Ontersecting Fully within WHENE Ontersecting Fully within WHENE Ontersecting Fully within Text: Image: Ontersecting Fully within Text: Image: Ontersecting Fully within Text: Image: Ontersecting Fully within Image: Ontersecting Fully within Image: Ontersecting Image: Ontersecting Image: Ontersecting Image: Ontersecting <t< td=""><td> Expand results Zoom To Re Geodata for Uganda A compliant implementation of WRS 1 operations including Transaction. a Open Preview Details Metad Wetlands of Uganda this is a wetlands shape file for all to cover types, this data is provider wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution quick bird imagery mukono, kampala and entebbe Bar Details Metadata Zoom To Protected Areas Protected Areas Protected Areas Polygons defining the outlines of la Details Metadata Zoom To Uganda lakes Polygons defining the outlines of la Details Metadata Zoom To </td><td>Suits Zoom To Searched Area Splus most of the SLD extension te PDF, SVG, KNU, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS ad suports impl atal Zoom To wetlands in uganda classified according d at the ministry's NWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution lassification is unknown. kes</td><td></td></t<>	 Expand results Zoom To Re Geodata for Uganda A compliant implementation of WRS 1 operations including Transaction. a Open Preview Details Metad Wetlands of Uganda this is a wetlands shape file for all to cover types, this data is provider wetland Information System) Details Metadata Zoom To High resolution Imagery High resolution quick bird imagery mukono, kampala and entebbe Bar Details Metadata Zoom To Protected Areas Protected Areas Protected Areas Polygons defining the outlines of la Details Metadata Zoom To Uganda lakes Polygons defining the outlines of la Details Metadata Zoom To 	Suits Zoom To Searched Area Splus most of the SLD extension te PDF, SVG, KNU, GeoRSS Also has .0.0 and WFS 1.1.0, supports all WFS ad suports impl atal Zoom To wetlands in uganda classified according d at the ministry's NWIS (National for greater kampala, i.e wakiso, d 1,2 and 3 at 0.6 m spatial resolution lassification is unknown. kes	

→ C 196.43.134.8	Geoportal	(× V 🚯 GeoServer: Layer Previev rkablePage=:org.geoserver.web.demo				
⇒ C [] 196.43.134.8	s:2292/geo	server/web/ :wicket:bookmai	rkablePage=:org.geoserver.web.demo	.марчтечемчаде			
🏠 GeoServer	r			Logged	in as admin.	Logout	
		ver Preview					
About & Status	· · · ·		nd provides previews in various formats for each.				
GeoServer Logs Contact Information	<	< 1 2 > >> Results 1 t	to 25 (out of 35 items)	🔍 Search			
About GeoServer	Туре	Name	Title	Common Formats	All Formats		
Data Jayer Preview		it.geomatics:Ug_Subcounties	Subcounties of uganda	OpenLayers KML GML	Select one	•	
Stores		it.geomatics:Ug_Parishes	Ug_Parishes	OpenLayers KML GML	Select one	T	
 Layers Layer Groups Styles 		it.geomatics:Districts of Uganda_2011	Districts of Uganda_2011	OpenLayers KML GML	Select one	¥	
Services		it.geomatics:uganda Rivers	uganda Rivers	OpenLayers KML GML	Select one	¥	
WCS WFS		it.geomatics:DrainageBasins in uganda	ug_DrainageBasins	OpenLayers KML GML	Select one	▼	
Ma WMS Settings		it.geomatics:Lakes in uganda	Ug_Lakes	OpenLayers KML GML	Select one	T	
I Global		it.geomatics:quickbird kampala	Lubigi and northernbypas	OpenLayers KML	Select one	•	
Coverage Access		it.geomatics:Wetlands1994	Wetlands1994	OpenLayers KML GML	Select one	T	
Tile Caching		it.geomatics:Protected Areas in uganda	Protected Areas _conserved areas	OpenLayers KML GML	Select one	¥	
 Caching Defaults Gridsets Disk Quota 		it.geomatics:Air ports and Airfields	Ug_Airfields	OpenLayers KML GML	Select one	T	
					0.1.1		
ecurity		it.geomatics:kampala_city_roads	kampala_city_roads	OpenLayers KML GML	Select one	•	
🔑 Settings		it.geomatics:kampala_city_roads it.geomatics:Uganda health centres	kampala_city_roads uganda health centres	OpenLayers KML GML OpenLayers KML GML	Select one	T	
🖗 Settings		it.geomatics:Uganda health					
Settings Authentication		it.geomatics:Uganda health centres	uganda health centres				
Settings Authentication (357 unread) - allanmazim	🖬 × 🔊 Geo	it.geomatics:Uganda health centres	uganda health centres	OpenLayers KML GML			
Security Settings Authentication (357 unread) - allanmazin C 196.43.1	🖬 × 🔊 Geo	it.geomatics:Uganda health centres	uganda health centres	OpenLayers KML GML			
 ➢ Settings ➢ Authentication ☐ (357 unread) - allanmazim : ➢ C □ 196.43.1; 	☑ × ♥ ֎ Geo 34.8:2292	it.geomatics:Uganda health centres	uganda health centres	OpenLayers KML GML	Select one		
 Settings Authentication (357 unread) - allanmazim : 	☑ × ♥ ֎ Geo 34.8:2292	it.geomatics:Uganda health centres	uganda health centres	OpenLayers KML GML	Select one	T	
	∝ ♥ ֎ Geo 34.8:2292 2007	it.geomatics:Uganda health centres oportal × V 2/geoserver/web/	uganda health centres	OpenLayers KML GML	Select one	T	
 Bettings Authentication (357 unread) - allanmazin : ⇒ C □ 196.43.1; GeoServ 	∝ ♥ ֎ Geo 34.8:2292 2007	it.geomatics:Uganda health centres	uganda health centres	OpenLayers KML GML	Select one	T	
 Bettings Authentication (357 unread) - allanmazin ⇒ C ☐ 196.43.13 GeoServ Construction 	∝ ♥ ֎ Gee 34.8:2292 2007	it.geomatics:Uganda health centres oportal × V 2/geoserver/web/	uganda health centres	OpenLayers KML GML	Select one	T	
 Bettings Authentication (357 unread) - allanmazin: ⇒ C □ 196.43.12 GeoServ About & Status Server Status 	∝ ♥ ֎ Gee 34.8:2292 2007	it.geomatics:Uganda health centres oportal × (@ 2/geoserver/web/ Welcome	uganda health centres	OpenLayers KML GML	Select one	T	
 Settings Authentication (357 unread) - allanmazin : → C □ 196.43.1: GeoServe About & Status Server Status GeoServer Logs 	∝ ♥ @ Gee 34.8:2292 2007	it.geomatics:Uganda health centres oportal × (2/geoserver/web/ Welcome	uganda health centres	OpenLayers KML GML	Select one	•	
 Settings Authentication 357 unread) - allanmazim : ⇒ C □ 196.43.1: GeoServe Contact Information 	⊂ 34.8:2292	it.geomatics:Uganda health centres oportal × 2/geoserver/web/ Welcome This GeoServer belongs to Dep	uganda health centres	OpenLayers KML GML Server: Welcome ×	Select one	Cogged in as admin. Service Capab	
Settings Authentication (357 unread) - allanmazin (357 unread) (357 unre	■ Gen 34.8:2292	it.geomatics:Uganda health centres oportal × 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resource	uganda health centres	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use	Select one	v Logged in as admin. Service Capab WCS	
Settings Authentication (357 unread) - allanmazin (357 unread) (357 unrea	© Gee 34.8:2292	it.geomatics:Uganda health centres oportal × () 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resour of the Canadian Geospatial Dat	uganda health centres	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use	Select one	v Cogged in as admin. Service Capab WCS 1.0.0	
Settings Authentication (357 unread) - allanmazim (357 unread) - allanmazi	© Gee 34.8:2292	it.geomatics:Uganda health centres oportal × 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resource	uganda health centres	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use	Select one	v Logged in as admin. Service Capab WCS	
Settings Authentication (357 unread) - allanmazim : (357 unread) - allanmazim : (196.43.1) (2) 196.43.1) (2) 196.43.1) (3) Geo Server (3) Geo Server (4) Out & Status (5) Server Status (5) Geo Server (5) Geo Server (5) Contact Information (6) About GeoServer (5) Contact Information (6) About GeoServer (7) Cata (2) Layer Preview (3) Workspaces	© Gee 34.8:2292	it.geomatics:Uganda health centres oportal × () 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resour of the Canadian Geospatial Dat	uganda health centres	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use	Select one	v v Service Capab WCS 1.0.0 1.1.0	
Settings Se	© Gee 34.8:2292	it.geomatics:Uganda health centres oportal × () 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resour of the Canadian Geospatial Dat	uganda health centres	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use	Select one	Service Capab WCS 1.0.0 1.1.0 1.1.1	
Settings Authentication (357 unread) - allanmazin (357 unread) (357 unre	© Gee 34.8:2292	it.geomatics:Uganda health centres oportal × 2 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resourd of the Canadian Geospatial Dat sharing, access and us of open 33 Layers	uganda health centres Geoportal × Geo Geomatics and land managem support provided by GeoConnections, a na ces Canada. GeoConnections supports the ta Infrastructure (CGDI), an on-line resour n geospatial information". Co Add layers	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use	Select one	V Service Capab WCS 1.0.0 1.1.0 1.1.1 1.1 2.0.1 WFS	
Settings Authentication (357 unread) - allanmazin (357 unread) (357 unrea	© Gee 34.8:2292	it.geomatics:Uganda health centres oportal × 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resour of the Canadian Geospatial Dat sharing, access and us of open 33 Layers 23 Stores	uganda health centres Geoportal × Geo Georatics and land managem support provided by GeoConnections, a na ces Canada. GeoConnections supports the ta Infrastructure (CGDI), an on-line resour n geospatial information". Add layers Add layers Add stores	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use	Select one	• • • • • • • • • • • • • •	
 Settings Authentication (357 unread) - allanmazim (357 unread) - allanmazim (196.43.1) (196.43.1	© Gee 34.8:2292	it.geomatics:Uganda health centres oportal × 2 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resourd of the Canadian Geospatial Dat sharing, access and us of open 33 Layers	uganda health centres Geoportal × Geo Geomatics and land managem support provided by GeoConnections, a na ces Canada. GeoConnections supports the ta Infrastructure (CGDI), an on-line resour n geospatial information". Co Add layers	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use	Select one	• • • • • • • • • • • • • •	
 Settings Authentication (357 unread) - allanmazim (357 unread) - allanmazim (196.43.1) (196.43.1	© Gee 34.8:2292	it.geomatics:Uganda health centres oportal × 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resourc of the Canadian Geospatial Dat sharing, access and us of open 33 Layers 23 Stores 8 Workspaces	uganda health centres Geoportal × Geo Geoportal × Geo Geoportal × A Geoportal Comparison of the tent of the tent of tent	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use ce that improves the	Select one	• • • • • • • • • • • • • •	
Settings Se	© Gee 34.8:2292	it.geomatics:Uganda health centres 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resour of the Canadian Geospatial Dat sharing, access and us of open 33 Layers 23 Stores 8 Workspaces The master password for th	uganda health centres Geoportal Geoportal Geomatics and land managem support provided by GeoConnections, a na ces Canada. GeoConnections supports the ta Infrastructure (CGDI), an on-line resour a geospatial information". Add layers Add stores Create workspaces his server has not been changed from the	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use ce that improves the	Select one	• • • • • • • • • • • • • •	
Settings Authentication (357 unread) - allanmazin (357 unread) - allanmazin (357 unread) - allanmazin (357 unread) - allanmazin (357 unread) - allanmazin (357 unread) - allanmazin (357 unread) (357 u	© Gee 34.8:2292	it.geomatics:Uganda health centres oportal × 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resourc of the Canadian Geospatial Dat sharing, access and us of open 33 Layers 23 Stores 8 Workspaces	uganda health centres Geoportal Geoportal Geomatics and land managem support provided by GeoConnections, a na ces Canada. GeoConnections supports the ta Infrastructure (CGDI), an on-line resour a geospatial information". Add layers Add stores Create workspaces his server has not been changed from the	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use ce that improves the	Select one	• • • • • • • • • • • • • •	
Settings Authentication	© Gee 34.8:2292	it.geomatics:Uganda health centres 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resourt of the Canadian Geospatial Dat sharing, access and us of open 33 Layers 23 Stores 8 Workspaces The master password for th recommended that you change	uganda health centres Geoportal × Geo Geo Geomatics and land managem support provided by GeoConnections, a na ces Canada. GeoConnections supports the ta Infrastructure (CGDI), an on-line resour is geospatial information". Add layers Add stores Cate workspaces Add stores Cate workspaces Add stores Cate workspaces Add stores Cate workspaces Add stores Add stores Cate workspaces Add stores A	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use cc that improves the default. It is highly	Select one	• • • • • • • • • • • • • •	
Settings Authentication (357 unread) - allanmazim (357 unread) (357 unread) - allanmazim (357 unread) (357 unread	Cr Cr	it.geomatics:Uganda health centres 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resour of the Canadian Geospatial Dat sharing, access and us of open 33 Layers 23 Stores 8 Workspaces & The master password for th recommended that you change & The administrator password	uganda health centres Geoportal × Geo Geo Geomatics and land managem support provided by GeoConnections, a na ces Canada. GeoConnections supports the ta Infrastructure (CGDI), an on-line resour the geospatial information". Add layers Add stores Cate workspaces Add stores Add stores Add stores Add stores Add stores Cate workspaces Add stores	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use cc that improves the default. It is highly	Select one	• • • • • • • • • • • • • •	
Settings Authentication (357 unread) - allanmazin (357 unread) (357 unrea	Cr Cr	it.geomatics:Uganda health centres 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resourt of the Canadian Geospatial Dat sharing, access and us of open 33 Layers 23 Stores 8 Workspaces The master password for th recommended that you change	uganda health centres Geoportal × Geo Geo Geomatics and land managem support provided by GeoConnections, a na ces Canada. GeoConnections supports the ta Infrastructure (CGDI), an on-line resour the geospatial information". Add layers Add stores Cate workspaces Add stores Add stores Add stores Add stores Add stores Cate workspaces Add stores	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative e integration and use cc that improves the default. It is highly	Select one	 V Service Capab WCS 1.0.0 1.1.1 2.0.1 WFS 1.0.0 1.1.1 1.1.0 2.0.0 WMS 1.1.1 1.3.0	
Settings Authentication (357 unread) - allanmazin (357 unread) - allanm	Cr Cr	it.geomatics:Uganda health centres 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resour of the Canadian Geospatial Dat sharing, access and us of open 33 Layers 23 Stores 8 Workspaces & The master password for th recommended that you	uganda health centres Geoportal × Geo Geoportal and managem Support provided by GeoConnections, a na ces Canada. GeoConnections supports the ces Canada. GeoC	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative i integration and use cce that improves the default. It is highly m the default. It is	Select one	 Service Capab WCS 1.0.0 1.1.1 2.0.1 WFS 1.0.0 1.1.1 2.0.0 WMS	
Settings Authentication (357 unread) - allanmazin (357 unread) (357 unrea	Cer	it.geomatics:Uganda health centres 2/geoserver/web/ Welcome This GeoServer belongs to Dep University, Uganda "Financial s initiative led by Natural Resour of the Canadian Geospatial Dat sharing, access and us of open 33 Layers 23 Stores 8 Workspaces & The master password for th recommended that you	uganda health centres Geoportal × Geo Geo Geomatics and land managem support provided by GeoConnections, a na ces Canada. GeoConnections supports the ta Infrastructure (CGDI), an on-line resour the geospatial information". Add layers Add stores Cate workspaces Add stores Add stores Add stores Add stores Add stores Cate workspaces Add stores	OpenLayers KML GML Server: Welcome × ent, makerere ational collaborative i integration and use cce that improves the default. It is highly m the default. It is	Select one	 V Service Capab WCS 1.0.0 1.1.1 2.0.1 WFS 1.0.0 1.1.1 1.1.0 2.0.0 WMS 1.1.1 1.3.0	

For more information about the GSDI or to subscribe to the GSDI News List, please see <u>http://gsdi.org</u>. For questions about this report, please contact <u>grants@gsdi.org</u>.

GEO-INFORMATION MANAGEMENT (GEO-IM) WORKING GROUP MEETING, THURSDAY 27 NOVEMBER 2014, 9.00 AM IN THE CONFERENCE ROOM, 1 FLOOR

Draft Agenda

- 1. Chair's Opening Remarks
- 2. Presentations
- a. World Geography Awareness Week -Richard Senoga (USAID)
 - b. Towards GIS Interoperability in Uganda: How well can we share geoinformation –Allan Mazimwe (MUK) -15min
 - c. New GIS -based Projects, District and Urban Roads Mapping and Road Database Project -BJ Muhwezi (for MoWT) -15min
 - d. Review of Membership of the Geo-IMW Group -Richard Senoga -15min

HEALTH BREAK and NETWORKING (10.00-10.30hrs)

- e. Dissemination of Census 2014 GIS Layers with Provisional National Population and Housing Data -BJ Muhwezi (UBOS) -20min
- 3. Updates from member agencies -30min 4. Review of Minutes of the Previous Meeting -10min
- 5. Discussions and Way-forward -20min
- 6. AOB -5min
- 7. Closure



Report - 2014 GSDI Small Grant Agreement 30-Uganda-MakerereUniv II.docx

Stakeholders identified

Datasets	Data source
Coordinate reference systems	Entebbe mapping centre
Geographical names	Entebbe Mapping centre
Administrative units Administrative boundaries Parishes, counties and sub counties Town councils Districts 	UBOS, Ministry of Local Government
Addresses	Post office
Cadastral parcels	Ministry of lands, housing and urban development
Transport networks	Ministry of works and transport
Hydrography	Ministry of water and environment, National
- Lakes	Water and Sewerage Corporation
- Rivers	
- Drainage basins	
Protected sites	NEMA
- Wetlands	Uganda wildlife authority
- Forests	National forestry authority
- National parks	

Annex 2

Datasets	Data source
Elevation Aster	National Forestry Authority
Land cover	Entebbe Mapping centre
Ortho-imagery (kampala)	KCCA GIS section and Entebbe Mapping
	centre
Geology	Meteorological department, Entebbe

Annex 3

Datasets	Data source
Statistical units	UBOS
-	
Buildingsnot available	
Soil	National Agricultural Research Centre,
	Kawanda
Land use	Not available
Human health and safety	Ministry of health
- health facilities/ centres (from DHIS	
uganda)	
- DHS data	
Utility and governmental services	Ministry of works and transport
- Water	
- Electricity	
0	
Environmental monitoring facilities	NEMA, open portals
- Imagery sources	
Production and industrial facilities	Private sector Foundation

Report - 2014 GSDI Small Grant Agreement 30-Uganda-MakerereUniv II.docx

Banks and financial servicesIndustrial parks	
Agricultural and aquaculture facilities - production zones	Ministry of agriculture, aquaculture and fisheries, Kawanda
Population distribution-demography - census 2002 and may be will include 2014 - afripop gridded pop data	UBOS
Schools	Ministry of education

Annex 4	
Datasets	Data source
Area management/restriction/regulation zones & reporting units	Not available
Natural risk zones	Office of the Prime Minister
Atmospheric conditions	Meteorological department, Entebbe
Meteorological geographical features	Meteorological department, Entebbe
Bio-geographical regions	
Habitats and biotopes	Uganda Wildlife Authority
Species distribution	Not available
Energy resources	Ministry of energy, UETCL
Mineral resources	Ministry of energy