GLOWA-VOLTA PROJECT (GVP)

Report of the training workshop

ON

“Introduction to Geographic Information Systems and Remote Sensing”

ORGANISED BY

UNITED NATIONS UNIVERSITY (UNU)-INSTITUTE FOR NATURAL RESOURCES IN AFRICA (INRA) & GLOWA-VOLTA PROJECT

AT

CENTER FOR GEOGRAPHIC INFORMATION SYSTEM AND REMOTE SENSING, UNIVERSITY OF GHANA, LEGON

FROM

19th to 23rd May 2008
**Introduction**

In recognition of the importance of Geographic Information System (GIS) and Remote Sensing (RS), United Nations University-Institute for Natural Resources in Africa (UNU-INRA) and GLOWA-Volta project organised a training workshop to update its partners on the potentials and application of these tools.

**Location of the workshop**

The training workshop was held at the Centre for Remote Sensing and Geographic Information System (CERSGIS) University of Ghana, Legon, Accra from 19th to 23rd May 2008. The resource persons for the training were from CERSGIS.

**Attendance**

Participants to the training workshops were from partner institutions of the GLOWA-Volta project. Invitation letters were sent to these institutions (listed below) to nominate two staff each to be trained in GIS and RS. The total participants for the training workshop were 15 (Appendix I).

1. Environmental Protection Agency
2. Savanna Agricultural Research Institute
3. Ghana Meteorological Agency
4. Water Research Institute
5. Water Resources Commission
6. Hydrological Services Department
7. Institute of Mathematical Sciences
8. Soil Research Institute

**Opening**

The training workshop was opened by Dr. Boubacar Barry (Coordinator GLOWA-Volta project) on the 19th May, 2008 at 9:00 am. In his opening speech, Dr. Barry gave a brief about the GLOWA-Volta project and its current state. He informed participants about the successes of GLOWA-VOLTA project, one major area of success he highlighted was capacity building. He said, GLOWA-Volta project have sponsored over 12 PhD students from partner institutions in Ghana. Additionally, the main thrust of GLOWA-Volta is to develop tools that would aid in the sustainable management of water resources in the Volta River basin. This training is part of the capacity building process to enable partner institutions use geo-spatial tools developed by the project. Finally he wished all participants a successful training workshop. Benjamin Turkson (UNU-INRA) welcomed participants and informed them about logistic arrangement to cater for their needs during the training period. Present during the opening ceremony were Dr Barnabas Amisigo, Benjamin Turkson (UNU-INRA), and Benjamin Akuetteh (training coordinator CERSGIS).

**Training Sessions**

During the five days training workshop, participants were taken through concepts and application of Geographic Information System and Remote Sensing. The course contents are listed below.

- Introduction to GIS/RS concepts
- Introduction to data capture using GPS
- Introduction to RS using Erdas Imagine for basic image processing
- Attribute data entry/linkage to spatial data/data analysis
• Introduction to GRCGIS9 for basic GIS analysis, cartographic visualisation and Map production.
See Appendix II for the course schedule and training materials.
Participants learning how to use GPS

Closing ceremony
The closing ceremony took place on 23rd May, 2008 at 11am. Present were Mr. Foster Mensah Executive Director of CERGIS, Dr. B. Barry coordinator of GLOWA-VOLTA project Ghana, Dr. Konadu Acheampong programme officer and Administrator of UNU-INRA, Benjamin Akuetteh and Dr. Barnabas Amisigo. In a speech delivered by Dr Barry, he asked participants to make the effort to put what they have learnt into practical use. They should also continuously practise what they have been taught in order to be perfect. The Director of CERGIS thanked UNU-INRA and GLOWA-VOLTA for giving CERGIS the opportunity to train its partners. He added that CERGIS is open for any form of assistance participants will require from them, but went on to inform participants that GIS technology is changing and they need to keep abreast with it by updating their skills.

Dr Konadu Acheampong closed the session. He thanked GLOWA-Volta project for facilitating this workshop. He went on to trace the relationship between UNU-INRA and CERGIS since 1988. For acquisition of GIS and RS software he advised participants to route it through their head of institution to be included in their annual budget. He added that some embassies are willing to fund the purchase of software if a good proposal is presented. Dr Acheampong was of the view that participants to training workshops in the country need to be evaluated to verify if what they have learnt has benefited society, i.e. alleviating poverty. Additionally there is also the need to find out to what extent human
Participants Comments on the training

Participants were given the opportunity to comment about the training programme:

Kafui Quashigah of Ghana Meteorological Agency, was of praise for the training course, but was quick to add that, he will need more training that he can apply to his area of specialization (Weather forecasting).

Nicholas Akkuffo of Hydrological Services Department asked if UNU-INRA and GLOWA Volta project could assist in the provision of software to enable them practise what they have learnt.

Samuel Nortey of Institute of Mathematical Sciences remarked that the course has been an eye opener to the capabilities of GIS/RS. An advance course is needed.

Mrs Jewel Kujawu of EPA informed the organisers that the time for this training workshop was too short and requested for a second course to be organised.

Samuel Banfo of Soil Research Institute- Accra said the training programme was educative, resourceful; he has gained much understanding of GIS/RS. He can now capture, manipulate and display data. However, he was of the view that they should have been taught how to create shape files in ARCGIS. Therefore he would appreciate it if advance training is organised.

Recommendation

- The introductory course should be for two weeks instead of one week.
- An advance course in GIS and RS should be organised as a follow-up to the introductory course.
- The training coordinator should compile links of free GIS and RS software’s and disseminate to participants.
- There should be a follow-up to verify if participants are using the GIS and RS tools in their work place.
- The training workshop should be done outside Accra, for participants to concentrate on the training programme.
Sample Certificate

CENTRE FOR REMOTE SENSING AND GEOGRAPHIC INFORMATION SERVICES
University of Ghana, Legon

Certificate

This is to certify that

Boasiako Ohene Antwi (Dr)

has completed a customized training programme in
Introduction to Geographic Information System & Remote Sensing:
GIS Concepts, Introduction to data capture (GPS), Introduction to ArcView9 for Basic GIS Analysis, Erdis Imagine for Basic Image Processing, Cartographic Visualisation & Map Production.

held at CERSGIS, Legon, Ghana
from 19th - 23rd May 2008

Training Co-ordinator CERSGIS

Director UNU-INRA

Executive Director CERSGIS

CERSGIS/018/2008
## APPENDIX I
### GIS and Remote Sensing course participant’s attendance sheet
**19th - 22nd May 2008**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Affiliation</th>
<th>Contact email/phone</th>
<th>Phone number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicholas Akuffo</td>
<td>Hydrological Service Division, Accra</td>
<td></td>
<td>0249696240</td>
</tr>
<tr>
<td>Emmerson Bedford Amoah</td>
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<td></td>
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<tr>
<td>Emmanuel Dugan</td>
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<tr>
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<td></td>
<td>0207780584</td>
</tr>
<tr>
<td>Nortey Samuel</td>
<td>Institute of Mathematical Sciences, Accra</td>
<td></td>
<td>0246145490</td>
</tr>
<tr>
<td>Mrs Jewel Kudjawu</td>
<td>Environmental Protection Agency, Accra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miss Mavis Owusu</td>
<td>Environmental Protection Agency, Accra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tahiru Fulera</td>
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<tr>
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</tr>
<tr>
<td>Samuel Tettey Banfro</td>
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<td></td>
</tr>
<tr>
<td>Ebenezer Tetteh Ablade</td>
<td>CSRI-Soil Research Institute, Accra</td>
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<td></td>
</tr>
</tbody>
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