

Curriculum Vitae

I. PERSONAL INFORMATION	
Name :	Molla Maru
II. KEY QUALIFICATIONS	
	<ul style="list-style-type: none"> • GIS specialist, geo-data analyst & Lecturer • Teaching Quantitative methods, GIS and Remote Sensing courses given to undergraduate and postgraduate students of the department of Geography & Env. Studies, of AAU. • Training on most popular Vector and Raster based GIS Systems- ArcView GIS, ARCGIS, Idrisi, ArcInfo, and related Software; and on field data collection with GPS • GIS Application Designing and Customization, Database Management and Programming for Rural and Urban applications, • Statistical/field data collection, analysis (basic and advanced multivariate techniques) and integration with spatial-data from various sources – Existing maps, GPS survey data, Satellite imageries.
III. EDUCATION BACKGROUND	
Certificate:	<p>A 10 days training in Quantum GIS offered by AAU in collaboration with Oklahoma University in Sep 2013, A 4-day training in Advanced ArcGIS training offered by IFPRI Addis Ababa in Dec 2013. A 15-Days Training on Spatial Data Infrastructure by ITC, Holland and in collaboration with ECA, Addis Ababa- Ethiopia: September 2003.</p>
	A 40-days UN-SIDA Remote Sensing Training Course for Educators , May 1- June 9, 2000 – Stockholm University, Sweden.
M.Sc	Geo. Information System for Rural Application , Wageningen Agricultural University and - ITC, Institute for Aerospace and Earth Science, The Netherlands, Graduated in March 27, 1997.
	<i>Specialization (Thesis):</i> Information System for Regional Crop Forecasting System: Design, Integration and Customization of Crop-yield Estimation Model (PS123- Developed by WAU, Koning and Drissen) Within ArcInfo GIS
B.Sc	Statistics (With minor in Computer Science) , Statistics Dept., Addis Ababa University Graduated in December 1991.
	<i>Specialization:</i> Exploring Living Conditions (Socio-economic Characteristics) of Workers in public organization. Determining methods of sampling and estimation, designing, administrating questionnaires, analyzing statistical errors distribution and their patterns- using computers.
Other Training-Certificates on	<ul style="list-style-type: none"> • Different Computer Courses related to Word Processing, Spreadsheet, and Database management and programming in 1993-1994, Addis Ababa • Stat. Programs, Graphics Programs, and Utilities December 8, 1994, Addis Ababa. • Spatial Data Acquisition techniques – GPS, Map Digitizing and Statistical and location data integration in GIS Environment, December 8, 1994, Addis Ababa.
IV. RESPONSIBILITIES AND EXPERIENCES	
February 1992 to August 1995: Database Expert in SCRP (Soil Conservation Research Programme).	
	Management of database System with Responsibilities:
	<ul style="list-style-type: none"> • Research data collection and analysis: Sample size determination, descriptive and inferential statistics analyses, interpretation, and compilation of statistical results. Provision of training on Field Data Collection and Acquisition. • Field Experience: Several field trips in SCRP RUs for understanding the nature of thematic and spatial data on soil conservation parameters like climate, soil, soil loss, runoff, production, landuse, socio-economic, demography, topography etc. • Development and Improvement of Application Programs for data analyses, establishment of secondary databases and data presentation. Software worked with includes: Programming language (, QBASIC; FORTRAN, Access 97, ARCINFO for AML module of UNIX and NT SYSTEM; DBASE IV); GIS and RS packages (ARCGIS, ARCVIEW, ARCINFO, Surfur, Idrisi, ILWIS); Statistical

	<p>packages (SYSTAT, SPSS, EXCEL, STATOGRAPHICS etc), and others (EXCEL, ACCESS, DBASE, POWERPOINT etc.)</p> <ul style="list-style-type: none"> • Coordination of all database computer system management and related activities, Report writing on SCRP database activities and status of the database.
September 1995-June 1997: MSC Student at ITC/WAU, of the Netherlands	
	<ul style="list-style-type: none"> • Active participation in case studies, related to problem identification, system analysis, design and implementation of information systems in GIS environment for rural, urban & cadastral applications. • Automation of Information Systems, Database establishment, Scientific reports writing. • 1- month visit to the CDE, University of Bern, Switzerland (Evaluating the SCRP Database system and learning about the GIS Database for Soil Erosion and Conservation Programme were the main activities carried out).
September 1997-October 1998 : GIS specialist at ISS/a Private GIS consultant firm	
	<ul style="list-style-type: none"> • GIS Data acquisition: Digitizing, spatial data collection and correction using GPS (Activities carried out for the Development of Planning Office of Sidama Zone, LIS Department of Municipality of Addis Ababa) • Integration of Spatial Data (Topography, Admin boundary, Utilities (School, Health centers, roads etc.) with thematic data (demography, socio economic, agriculture, livestock etc. Activities carried out for the Development of Planning Office of Sidama Zone). • Establishment and customization of Database for planning applications (activities carried out for the Development of Planning Office of Sidama Zone) and for Regional Cartographic and Thematic Database Management (Activities carried out for ECA). • Provision of on job training to database mangers and users in particular planners and decision-makers.
November 1998 – till now: Lecturer at Department of Geography and Env. Studies AAU	
	<ul style="list-style-type: none"> • Provision of Lecture on GIS and Remote Sensing and Quantitative methods courses at Graduate and undergraduate programs of GeES and Archaeolog. • Preparing Teaching Materials for GIS and Remote sensing Courses and cases studies using local data. • Provision of Special on-job training or GIS based Geo data analysis with Arcview GIS, ArcGIS, Surfer 7, Idrisi GIS for research data - collected by Instructors, MA and PHD-students at AAU. • Few examples related to Mapping and Analysis spatial patterns and temporal trends of Land use/cover changes in Sekela - Upper Blue Nile River Catchment (Solomon, 2005), Watet Abay (Tenaw, 2007), Alkeso River Catchment (Daniel, 2005), Borena Sarite - Gobso (Sosina, 2000), many others to geo-statisal data analysis using GIS and Statistical packages.
V. PUBLICATION	
	<ul style="list-style-type: none"> • 1997, Information System Development Approach to Crop Forecasting at Regional Level, (System Development and Model Integration in GIS Environment)., MSC Thesis Wageningen-ITC, The Netherlands. • 1997, A Menu Driven Program in ArcInfo Ver. 7.03 for Unix System, That integrates Yield Simulation Model and its Spatial and Thematic Input/output in a user interface menus. Available in digital form. • 1996, Climatic data report - Part of SCRP`s 10-year database report. (Contributor to the published and distributed as Hard cover Book- publication series of CDE, University of Berne) • 1997, Report on SCRP Database (unpublished, Draft report) • 2001, the SCRP and Ethio-GIS Databases, Bern, Switzerland (Contributor to the databases published and distributed on CD) • 2001, Map sets for long-term monitoring of the Agricultural Environment in Six Research Stations in Ethiopia (Contributor to the published at 1: 10, 000 Hard copy maps) • 2013, a GIS Training Manual for Natural resource management and Socioeconomic development planning
Area of Interest and Memberships	
	<ul style="list-style-type: none"> • GIS/RS environment (Geog-data analysis) for rural development application through integrated use of Arcview/ArcGIS, and its extension modules (image analyst, spatial analyst, 3d analyst, geo-statistical analyst), statistical packages and Internet mapping. • Developing a customized NRM in a GIS environment, including, topographic corrected surface area

estimation, watershed modeling (surface flow modeling), land use cover mapping and change analysis, error assessment through statistical analysis and visualization

- **Memberships**- ITC-Alumni, EGA, ESRI-Sponsored - Professional network (GIS issues)

VI) Educational and Working Language

* English

VII) References

1. Dr. Muluneh Woldetsadik

P.O.Box: 1176

Chairman, Department of Geography and Environmental Studies, AAU

Tel: 251-0911-_____

Off: 251-0111-239730

[E@mail: mabshare@gmail.com](mailto:mabshare@gmail.com)

2. Dr. Desalegn Wana

P.O.Box: 1176

Department of Geography and Environmental Studies,

Associate Dean, College of Social Sciences, AAU

Tel: 251-0911-604302

Off: 251-0111-223771; 251-0111-239730

[E@mail: amsalu.aklilu@gmail.com](mailto:amsalu.aklilu@gmail.com)

3. Dr. Juerg Krauer,

SCRP's Former Geo Database Manager (Counterpart)

Center for Development and Environment (CDE),

Institute of Geography, University of Bern

Hallerstrasse 12, CH - 3012 Berne/ Switzerland

Tel. 41 31 631 88 22

Fax 41 31 631 85 44

4. Dr. Aklilu Amsalu

P.O.Box: 150223

Department of Geography and Environmental Studies,

Assistant Dean, College of Social Sciences, AAU

Tel: 251-0911-604302

Off: 251-0111-223771; 251-0111-239730

[E@mail: amsalu.aklilu@gmail.com](mailto:amsalu.aklilu@gmail.com)

5. Dr. Yohannes Gebremichael

P.O.Box: 1176

Chairman Ethiopian Geographers Association

Department of Geography and Environmental Studies,

Tel: 251-0911-_____

Off: 251-0111-239730

[E@mail: yohannesgm@yahoo.com](mailto:yohannesgm@yahoo.com)

6. Dr. Woldeamlak Bewket

P.O.Box: 1176

Department of Geography and Environmental Studies, AAU

Tel: 251-0911-_____

Off: 251-0111-239730

[E@mail: woldeamlak@geog.mail.aau.et](mailto:woldeamlak@geog.mail.aau.et)

7. Prof. Belay Tegene/Dr. Solomon Mulugeta

P.O.Box: 1176; Department of Geography and Environmental Studies, AAU

Tel: 251-0111-239730

[E@mail: css.aau@telecom.net.et](mailto:css.aau@telecom.net.et)

2. Dr. Karl Herweg, SCRP`s Desk Officer

Center for Development and Environment (CDE),

Institute of Geography, University of Bern

Hallerstrasse 12, CH - 3012 Berne/ Switzerland

Tel. 41 31 631 88 22

Fax 41 31 631 85 44

3. Dr. Solomon Abate, Senior Expert.

P.O.Box -- ----- ; Agri Service, Addis Ababa,

Tel. 651212 (office)

4. Ato Tamiru Habte,

Head Forest, Wildlife, Landuse, Soil and Water Conservation Regulatory

Department., Ministry of Agriculture

P.O.Box: 62347

tel: 154975

5. Dr. Kebede Tato, Former SCRP`s Manager

Swedforest International

Private Bag 59x, Ridgeway

Lusaka, Zambia

Tel. ++260 32 20579

Fax. ++260 32 20579

6. Prof. Ali Sharifi (Ali@itc .NL) and Drs. Johan de Meijere (jo@itc.nl)

ITC; P.O.Box- 6

Henglostraat 99 Enschede

The Netherlands

Tel. 0031-053-4874444

7. Ato Yohannes Debebe, W/ro Aster Solomon,

ISS`s Owner (Information System Services, PLC.)

Tel 251-0111- 51-20-32 (off.)