## 2021 CURRICULM VITAE (CV)

#### 1. Personal information

Given Name ELIAS SIME

Sur/Last Name LEGGESSE

**Mother Name** 

Sex MALE

City BAHIR DAR

Country ETHIOPIA

Telephone + 251960268755

E-mail 2003sime@gmail.com

Nationality ETHIOPIAN

#### 2. Work experience

• Dates (from - to)

• Name and address of employer

• Type of business or sector

Occupation or position held

August, 2005 - Present

Bahir Dar University

Education, Research and Community Service

Lecturer in the Faculty of Civil and Water Resources Engineering,

Bahir Dar University.

Main activities and responsibilities

#### As a Lecturer:

- Lecturer of Engineering Hydrology, soil and water conservations and Application of GIS in water resources for undergraduate students of Civil engineering and Water Resources Engineering Departments.
- Assist graduate students of Engineering Hydrology and Hydraulic Engineering Programs for the courses; Hydrology, , GIS and Remote Sensing in water resources.

#### As a Program Manager (Since Feb. 2012-Sept. 2012):

- Responsible to design and notify new program breakdown schedule per each semester which includes harmonizing the demand of academic environments such as class rooms, lab session with class programs. It also includes some important activities such as assignment of academic staffs for courses and recording academic staffs load holds.

## Additional activities and responsibilities

As a Hydrologist of the School of Civil and Water Resources Engineering (Since October, 2011):

- Worked on the **Hydrological Design and Supervision** of ditches, culverts, and Bridges of a road program, **Universal Road Access Project** (**URAP**). I have worked on the road projects such as; "Mecha woreda", "Bahirdar zuria woreda", "South Achefer" and "Durbet woreda"
- September, 2011 February, 2012, I participated on evaluation of Water Supply, Sanitation and Hygiene (WASH) program in Amahara Regional State, Ethiopia in collaboration with WaterAID. I participated in data collection, analyzing and report writing of the evaluation processes.
- November, 2010 June, 2011, I participated on evaluation of the Water Supply, Sanitation and Hygiene (WASH) program in the whole Ethiopia in collaboration with World Vision Ethiopia. I participated in data collection, analyzing and report writing of the evaluation processes.
- Worked on A Baseline Study for Kollela Model Vilage Strategic Plan Preparation – Infrastructure and Water Supply Section from April – August, 2018.
- Offered training on Application of FIS and RS in Water Resources Engineering and Management from Sep. 2018 Oct. 2018.
- Participated Baseline study team in INTEGRATED URBAN INFRASTRUCTURE AND SERVICES PLANNING of Bahir Dar town from 2017 Now.

• Dates (from - to)

June – October 2011

- · Name and address of employer
  - Type of business or sector
  - Occupation or position held
    - Main activities and responsibilities

Degarege, Temesgen and Friends Consultancy Services

Private organization

Project Engineer(Part Timer)

Supervision of the construction of "D/Sina" Town Water Supply Project

• Dates (from – to)

September, 2012 – September, 2015

- Name and address of employer
  - Type of business or sector
  - Occupation or position held
    - Main activities and responsibilities

      Worked and Projects
      Participated

Blue Nile Water Research Institute, Bahirdar University Research Institute

Researcher, Head of Hydrology and Watershed Directorate Organizing Seminars, Workshops and doing Researches

- Sept. 2013-June 2014, I worked on a project "Lake Tana Biosphere Reservation" on five selected wetlands of Lake tana; Dirma Mouth Wetland, Shesher & Wallela wetlands, Gelda shore and river Mouth Wetland, Yiganda Wetland, and Chimba wetlands. The project was

sponsored by **NABU**. I was involved in the mapping of the wetlands with the help of GPS, Google earth and ArcGIS environment, in determining the hydro-dynamicity of the wetlands, in determining the storage capacity of the wetlands, in determining the sources of water of the wetlands and in analyzing the water requirement of the wetlands for hydrological and ecological service they could provide.

Sept. 2012 - Jan. 2014, worked on a project work "The Natural and Socioeconomics Follow-Up Survey" under the watershed monitoring and Evaluation (WME) component of the Tana Beles Integrated Water resources Development in Ethiopia. I contributed in GIS data capturing. analyzing and mapping using of the natural resources management activities of the project.

- Sept. 2012- Jan. 2013, Worked in wetland management preparation of Infranze Wetland (main water source of Bahirdar town) as a hydrologist and GIS expert which was sponsored by SIDA. I contributed significantly in understanding of the hydrology of the wetland, mapping the land use/cover changes using ArcGIS.
- Worked as Internee in **Tana and Beles Sub Basin organization for three** month (TASIBO). During this time he worked Lake Tana Water quality assessment and modeling.

Dates (from – to)

Nov. 2003 – Aug. 2005

Name and address of employer

Bahir Dar Construction technology college

Type of business or sector

Education sector

· Occupation or position held

Assistant lecturer

. Main activities and responsibilities

Teaching under graduate students of Rural water supply and sanitation. During this period I have taught Hydrology, Hydraulics, Surveying, Water resource development, Auto CAD.

#### 3. Education and training

• Dates (from - to)

Sept. 2015 - May, 2016

• Name and type of organization providing education and training University of Twente in Enschede, The Netherlands

 Principal subjects/occupational skills covered

Geoinformation sciences and Earth Observation (Water and Environmental Management)

•Title of qualification awarded

Certificate

• Dates (from - to)

09/06/2014 - 13/06/2014

 Name and type of organization providing education and training

Hosted by the Innovation Lab for Small Scale Irrigation Project, Addis Abeba, Ethiopia

 Principal subjects/occupational skills covered

**ArcSWAT** 

• Title of qualification awarded

Certificate

• Dates (from - to) Nov. 2007 - August, 2009

• Name and type of organization Cornell University, USA providing education and training

• Principal subjects/occupational Integrated Watershed Management and Hydrology

skills covered

• Title of qualification awarded Master in Integrated watershed management and Hydrology

• Dates (from - to) Sept. 1998 - July, 2003

• Name and type of organization Arbaminch Water Technology Institute, Ethiopia

providing education and training

skills covered BSc in Hydraulic Engineering
• Title of qualification awarded

• Dates (from - to) 27 Feb. - 17 March, 2009

• Name and type of organization providing education and training  $Bahir\ Dar\ University\ (BDU)\ in\ collaboration\ with\ Technische Fachhochscule\ (TFH)\ Berlin.$ 

• Principal subjects/occupational skills covered

• Title of qualification awarded Certificate

• Dates (from – to) 26 Feb. – 09 April, 2002

• Name and type of organization providing education and training Ethiopian Electric Power corporation

• Principal subjects/occupational skills covered Field Training program in construction of Dam and Appurtenant works, Power tunnel, Powerhouse, Shafts and Tailrace at Gilgel Gibe

Hydroelectric project site (one of the biggest hydroelectric power

project in the country

 $\hbox{\bf \cdot Title of qualification awarded} \qquad Certificate \ of \ participation$ 

#### 4. Language Skills

Mother tongue	Amharic
Other Language	
<ul> <li>Reading skills</li> <li>Writing skills</li> <li>Verbal skills</li> </ul> Other Language	Good Good Good <b>English</b>
<ul><li>Reading skills</li><li>Writing skills</li><li>Verbal skills</li></ul>	Excellent Very Good Very Good

#### 5. Publications/ Book Chapters/ or Research works

#### **Publications (Published)**

Demesew Alemaw , Essayas K. Ayana , **Elias S. Legesse** , Michael M. Moges , Seifu A. Tilahun , Mamaru A. Moges. 2016. Estimating reservoir sedimentation using bathymetric differencing and hydrologic modeling in data scarce Koga watershed, Upper Blue Nile, Ethiopia. Journal of Agriculture and Environment for International Development - JAEID 2016, 110 (2): 413-427

Seifu Admassu Tilahun, Tegenu Ashagrie Engda, **Elias Sime Legesse**, C.D. Guzman, Assefa Derebe Zegeye, A.S. Collick, A. Rimmer & T.S. Steenhuis. 2011. An efficient semi-distributed hillslope sediment model: the Anjeni in the sub humid Ethiopian Highlands. Hydrol. Earth Syst. Sci. Discuss.

Steenhuis T.S., Collick A.S., Easton Z.M., **Leggesse E.S.**, Bayabil H.K., White E.D., Awulachew S.B., Adgo E., Ahmed A.A.. 2009. Predicting Discharge and Erosion for the Abay (Blue Nile) with a Simple Model. Hydrological Processes 23: 3728-3737.

### **Book Chapter**

**Leggesse E.S.**, Beyene B.S. 2017. Hydrology of Lake Tana Basin. AESS Interdisciplinary Environmental Studies and Sciences Series, Krystyna Stave et al. (Eds): Social and Ecological System Dynamics (Springer).

Woubneh, **Leggesse E.S**. Fenta Nigatea. 2017. Climate of Lake Tana Basin. AESS Interdisciplinary Environmental

Studies and Sciences Series, Krystyna Stave et al. (Eds): Social and Ecological System Dynamics (Springer).

Tegenu A. Engda, Haimanote K. Bayabil, **Elias S. Legesse**, Essayas K. Ayana, Seifu A. Tilahun, Amy S. Collick, Zachary M. Easton, Alon Rimmer, Seleshi B. Awulachew, and Tammo S. Steenhuis. Nile River Basin. Hydrology, climate and Water use (Springer).

#### Reports

**Leggesse E.S**, Klienstuech L. 2014. Flood Hazard mapping using HEC-HMS and HEC-RAS for Bahir Dar City. Blue Nile Water Institute. Bahirdar University. (unpublished)

Goraw Goshu, **Elias Sime Leggess**e et. Al., 2013. Ecological and socio-economic aspects of five wetlands around Lake Tana. Contract number: 9/2013\_No. 10. Project: For People and Nature- Establishment of a UNESCO Biosphere Reserve at Lake Tana in Ethiopia. Contractor: Bahir Dar University (BDU).

Goraw Goshu, **Elias Sime Leggese**, Getachew Tesfaye August 2013. Natural Resources Follow up Survey (Report). TANA BELES INTEGRATED WATER RESOURCES DEVELOPMENT PROJECT. Bahir Dar, Ethiopia. Bahir Dar University - Research and Community Service. Blue Nile Water Institute (BDU-BNWI).

Goraw Goshu, **Elias Sime Leggese** et al. 2013. Enfraz Wetland Restoration Project Report Bahir Dar University - Blue Nile Water Institute (BDU-BNWI). Bahir Dar, Ethiopia. **Elias S. Legesse**. 2009. Modeling rainfall runoff relationship of Anjeni watershed, highland of Ethiopia. (Master Thesis)

#### 6. Technical skills and competences

I have experiences working with computer technologies and I am competent in the following;

ArcGIS, HEC-HMS, HEC-RAS and ArcGIS extensions including (ArcHydro, Hec-Georas, and Hec-GeoHmS)

Programming language: MatLab

Microsoft office (Word, Excel, Access etc.)

# 7. References Additional information

Seifu Admasu (Ass. Proffesor) – Facultiy of Civil and Water Resources Engineering, Bahirdar University, Bahir Dar, Ethiopia.

Tel: +251-911-862766

Fasikaw Atanaw (PhD)- Chair Holder of Hydrology, Faculity of Civil and Water resources Engineering- Bahir Dar University, Bahirdar, Ethiopia

Tel: +251-918-780218

Mulugeta Azeze (PhD) – Facultiy of Civil and Water Resources Engineering, Bahirdar University, Bahir Dar, Ethiopia.

Tel: +251-911-057510