# CURRICULUM VITAE

## **PERSONAL** **INFORMATION**

## **NAME**: ZACHARIA MUNA MUNGA

**ADDRESS:** P.O BOX 267- 20300 NYAHURURU, KENYA.

**E-MAIL** : z.munga@unido.org, zachmuna@yahoo.com.

**CELLPHONE** : +254 722997861,

**NATIONALITY: KENYAN**

**LANGUAGES:** ENGLISH, KISWAHILI, LOCAL LANGUAGE

**QUALIFICATION SUMMARY**

**EDUCATION**:

1. **Master of Science in Agriculture and Rural Development.**

Kenya Methodist University. 2008-2012.

**2.**  **Post Graduate Diploma in Energy Management**

MIT- University of Pune-India(2011-2013).

**3. BSc. Agricultural Engineering.**

Egerton University (Kenya) – 1990-1996.

**Training Courses.**

**1. Certificate in Renewable Energy.**

Arava Institute- Israel –May 2015.

**2. Certificate in Environmental Impact Assessment-**

Egerton University-May 2013

**3. Certificate in Green Energy and Carbon Markets.**

UNEP Risoe Centre- Denmark- Aug 2011

**4. Certificate in Energy for Sustainable Development and Carbon financing (online)**

IIIEE Lund University- Sweden-2010

**5. Certificate in Ecological/ Sustainable Sanitation (online)**.

UNESCO-IHE: March – June 2009.

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**6. Certificate in Integrated Land Use Design (Permaculture Design Course)**

Management Training Bureau (Zimbabwe) - May 2007.

**AREAS OF COMPETENCE.**

1. Project Development and Management.
2. Sustainable Development.
3. Sustainable Agriculture
4. Natural Resources Management.
5. Renewable Energy and Energy Management.
6. Climate change adaptation and mitigation.
7. Enterprise development.
8. Environmental Impact Assessment.
9. Human Resources Management.

**Publication:**

-The Sustainable Agriculture Manual for Eastern Africa.

-Decentralized Sustainable Energy Manual

**COMPUTER SKILLS;**

- Microsoft word

- Microsoft Excel

- Microsoft Power Point.

- Internet

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**EMPLOYMENT HISTORY.**

1. **CURRENT EMPLOYMENT.**

**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO) OCT 2016- PRESENT.**

**POSITION: ENERGY COORDINATOR-KENYA.**

**Responsibilities:**

* Coordinate the Energy projects and ensure delivery of the outputs.
* Project planning and development and act as the secretary of the project steering committees.
* Supervise staff, contractors and consultants working on the projects in Kenya.
* Organize capacity building, awareness creation and knowledge management as well as plan, develop and disseminate materials for the project.
* Project monitoring and reporting.
* Monitor and review development in the area of renewable energy in Kenya and identify further project development opportunities.

**Achievements.**

-Training carried out for 40 senior government staff energy planning.

-Development of Decentralized Renewable Energy Planning Manual.

-Establish a biogas centre at Kenya Industrial Research and Development Institute (KIRDI).

-Feasibility studies for waste to energy investment in 4 companies.

-Installation of 3 industrial biogas plants in Kenya.

-Support development of industrial biogas standards in Kenya.

-Installation of efficient steam generation and chillers in 3 milk processing plants in Kenya.

- Management of the installation of Internet of Things (IOT) technology for geothermal plants operated by Kengen in Kenya.

- Overseen a study on l production of Hydrogen for industrial application.

**B) PREVIOUS EMPLOYMENT**

1. **COUNTY GOVERNMENT OF NYERI (JULY 2015-SEPT 2016)**

**POSITION: COUNTY CHIEF OFFICER- Energy Department.**

This is the accounting and authorized officer for the department**.**

**Responsibilities**

* Provide oversight in the development and implementation of energy projects in the county.
* General management, administration and coordination of services within the department.
* Guiding the Initiation, development and implementation of policies and sector plans.
* Development and Implementation of strategic plans.
* Promotion of national values and principles of governance and values and principles of County
* Overseeing implementation and monitoring of performance management systems.
* Monitoring and evaluation of the projects within the department.
* Supervision and development of the workforce in the department to ensure the targets are met.
* Budget preparation, Management and Reporting
* Membership to the County Human Resource Advisory Committee.
* Direct the procurement, use and maintenance of all county property and equipment under the department.

1. **CENTRE FOR INNOVATIVE DEVELOPMENT SOLUTIONS (cides) (May 2013- 2015).**

**POSITION: Consultant.**

**RESPONSIBILITIES:**

* Programme development through diversification of the pool of work in, Energy and natural resources management, quality control and reporting.
* Undertake consultancies in renewable energy and natural resources management.
* Provide support to team and individuals on renewable energy and climate change and ensure their on-going learning and development.
* Develop and maintain strong relationships with other development partners.
* Provide advisory services to clients on Environment and Natural Resources Management within the objective of mainstreaming green growth in policies, strategies, frameworks, and action plans. Provide guidance on addressing green growth and climate change concerns in projects.
* Support partner communities in the development of effective ENRM projects and programs.

**Achievements;**

* Worked as the Objective observer in the validation of the Tripple Quest Hydraid Biosand Water Programme in Siaya Kenya.
* Training of over 270 biogas artisans and farmers on biogas technology and use of bio-slurry for crop production.
* Coordinated the desk and field evaluation of 1490 project proposal under the Upper Tana natural Resources Management Programme funded by IFAD in Mt. Kenya region.
* Initiated and supported the implementation of 262 NRM projects that were selected from the 1490 above.
* Carry out monitoring and guiding the implementation of the 262 NRM projects.
* Conducted the end-term evaluation of the ACT! CRM funded projects that were implemented by 22 organizations in Kenya.
* Conducted ToT training on the local context of climate change and the appropriate technologies for mitigation and adaptation for a total 419 community members in Laikipia.
* Development of sub-catchment management plans for 3 water catchments and Participatory Forest management plans for 2 forest users associations.

1. **MICRO-ENTREPRISE SUPPORT PROGRAMME TRUST –MESPT (FEB 2011 – APRIL 2013).**

**PROGRAMME NAME:**

1. Greening the Agriculture Value Chains (Natural Resources Management Programme).
2. Energy Enterprises Support Initiatives for the Coast Region.

**POSITION: PROGRAMME OFFICER**

**RESPONSIBILITIES;**

* Coordinate and implement technical, financial and administrative programs to ensure project implementation and timely responses to requests for assistance by the partner communities.
* Provide overall management and guidance of staff in the programme.
* Ensure timely preparation of work plans, technical reports, Monitoring and evaluation for the programme as well as fundraising.
* Identify, develop and promote adoption of renewable energy technologies in agriculture, and water resources management in the region as a tool for climate change adaptation.
* Identify and support the growth of SMEs through training, market development and financial linkages.
* Undertake sensitization programmes with key agencies and stakeholder in the project area on climate change.
* Develop the terms of reference (ToR) for the SMEs and supervise consultants in natural resource management and energy service provision.
* Carry out surveys (water resources, energy resources etc) and Compute and design implementation of conservation practices.

**ACHIEVEMENTS.**

1. Conducted assessment of the water resources and renewable energy application in Kitui, Kilifi, Makueni, Taita Taveta and Kwale counties for 805 farmers and pastoralists.
2. Coordinated and supported Environmental and Social impact assessments 7 projects.
3. Designed and installed over 600 biogas units and 75 solar systems for water heating, lighting and water pumping for households and institutions.
4. Designed and implemented sustainable (Climate Smart) agriculture programmes for small holder farmers in Taita, Makueni, Kilifi, Kwale and Kitui counties as well as train over 220 youths as service providers and processors.
5. Trained and supported 120 SMEs in clean energy enterprises through training and financial linkages (biomass, solar, briquettes, biogas and installation of water harvesting and drip/sprinkler irrigation systems).
6. Worked in partnership with Kenya Association of Manufacturers to carry out energy audits and efficiency improvement for 14 SMEs and with KFS in sustainable charcoal production and forest management in Kilifi, Taita and Kitui.
7. Developed training course and curriculum on natural resources management for implementing staff and partners.
8. Dissemination of the best practices with government and other agencies in the region.
9. Overall programme management and reporting.
10. **PRACTICAL ACTION EASTERN AFRICA. (Nov.2008- Jan 2011).**

**PROGRAMME NAME:**

1. Developing Energy Enterprises Project ( EU FUNDED).
2. Water and Sanitation for the urban poor. ( EU FUNDED).

**POSITION: PROGRAMME OFFICER**

**RESPONSIBILITIES:**

* To contribute towards development of the regional programme in Eastern Africa through implementation of Practical Action regional strategy and International objective of scaling up access to modern clean energy, nationally and regionally.
* To Mobilize, train, offer mentorship and financial linkages to energy SMEs in Kenya.
* Development of water access programmes for the communities in the urban areas of Nairobi and Nakuru.
* To develop and market concept notes and proposals for fundraising in line with programme objectives and priorities
* To Write quarterly, annual and final projects and financial reports as per donor requirements
* To ensure prudent financial management of the project and the outcomes.
* To build networks and collaboration for the development of energy access in Kenya.
* To actively undertake other roles as assigned.

**ACHIEVEMENTS**

* Overseen the scaling up of access to modern energy in rural and peri-urban areas of Kenya through mobilization and transfer of technology and business skills to over 300 energy entrepreneurs, in the Developing Energy Enterprises Project funded by European Union.
* Development of implementation and monitoring tools for Developing of Energy Entrepreneurship Project (DEEP) by the Global Village Energy Partnership (GVEP) in East Africa.
* Timely preparation and presentation of projects reports to the funding partner (ACP-EU).
* Developed tools for climate change adaptation and mitigation in the arid areas of Turkana and Madera as well as the urban informal settlements.
* Technical design and installation of water and sanitation units for over 5000 households in the informal settlements of Mukuru Kwa Njenga and Kibera in Nairobi.
* Running of the ENERGIAKenya network. This is a gender and energy network in Kenya.

1. **SUSTAINABLE AGRICULTURE COMMUNITY DEVELOPMENT**

**PROGRAMME (SACDEP-KENYA) (Nov. 2004- Oct.2008)**

**PROJECT NAMES:**

**1. Water, Livestock and Gardens Project (WLG).**

**2. Youth Empowerment in Agriculture Production (YAEP).**

**POSITION HELD**: **PROGRAMME COORDINATOR.**

**RESPONSIBILITIES**.

* To carry out the Programme management activities of planning, organization, coordination and control of activities by 6 staff in 6 districts in Central and Eastern regions of Kenya.
* Provide human resources management activities in the programme.
* To contribute towards the improvement of the partner community’s food, nutritional and agro-income security through designing, mobilizing resources and implementation of community programmes on Sustainable Agriculture principles and practices as well as pastoral programmes.
* To develop and ensure continued use of training and demonstration materials for use in Sustainable Agriculture extension.
* To Design, mobilize resources and lead in implementation, monitoring and control of Rural Water, Sanitation and energy projects in Eastern and Central Kenya. The main activities were water harvesting and conservation as well as household hygiene and renewable energy for the target community beneficially.
* Coordinate planning, reporting as well as programme development through fundraising.
* To organize and train on water harvesting technologies and on use of renewable energy to community based technologists. These included rain water harvesting and storage, hand pump and wind pump/generators, biogas/sanitation systems installation and maintenance, as well as harnessing solar energy for domestic use.
* To represent SACDEP in regional and networks meetings when called upon.

**ACHIEVEMENTS.**

* Improved sanitation at households through recycling of animal and house hold water and solid waste as well as proper disposal of human waste for the targeted 10,000 households.
* Improved access to clean energy for over 3,000 households through installation of biogas, windmills units and improved cook stoves.
* Creating access to water for over 10,000 households in Central and Eastern Kenya through construction of water pans, domestic water tanks, stream/catchment protection and installation of hand pumps and irrigation systems.
* Improved food, Nutrition and agro-income security for more than 1440 households through training on dry land farming and livestock husbandry and development of marketing channels.
* Created jobs for over 150 youths in production, processing, marketing and provision of agricultural services.
* Writing of the Sustainable Agriculture Manual for East Africa. This is yet to be published. Developed and ensured continued use of training materials for Agriculture and livestock extension.

1. **LAIKIPIA WEST RURAL COMMUNITY EDUCATION CENTRE**

(JANUARY 1998- OCT 2004.)

**POSITION HELD**: **PROJECT OFFICER:**

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**RESPONSIBILITIES:**

* Design and construct of domestic water harvesting units and farm structures.
* Design and train farmers on runoff water harvesting technologies.
* Develop land use plans as well as initiate soil and water conservation and offer technical support to farmers.
* Provide extension service to farmers on crop and livestock production.