

## CURRICULUM VITAE FOR DR. CHELESTINO PETER BALAMA

### PERSONAL DATA

**Name:** Chelestino Peter Balama  
**Sex:** Male  
**Nationality:** Tanzanian  
**Address:** Tanzania Forestry Research Institute,  
P.O. Box 1854, Morogoro Tanzania. Tel. +255-23-2604532/4499; Fax. +255-23-2603725; Mobile: +255-784 404873 ; Home: +255-736 202287  
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### OVERVIEW

Dr. Chelestino Peter Balama is a Research Scientist with fourteen (14) years' experience on forestry research particularly on Timber and Non-Timber Forest Products (NTFPs) science, climate change and development. His current research interests include Sustainable utilisation of timber, wood based boards and NTFPs; and Valuation of forest resources. He has also experience in forest certification and auditing. Has published about 17 papers in local and international journals.

### PROFESSIONAL QUALIFICATION

- PhD Forestry: Sokoine University of Agriculture Morogoro, Tanzania (2016)
- MSc. Forestry: Sokoine University of Agriculture Morogoro, Tanzania (2009)
- Certificate in Forest Certification: Swedish University of Agricultural Sciences (2008)
- B.Sc. Forestry: Sokoine University of Agriculture Morogoro, Tanzania (2003)

### COMPUTER LITERACY

- Basic computer applications and MS Offices.
- SPSS data analysis programme

### LANGUAGES

Kiswahili and English (fluently)

### SUMMARY OF EMPLOYMENT

**Name of employer:** Ministry of Natural Resources and Tourism: Tanzania Forestry Research Institute.

**Present duty Station:** Tanzania Forestry Research Institute (TAFORI),  
P. O. Box 1854, Morogoro, Tanzania.  
Tel. +255-23-2613725; +255-23-261 4498/4499  
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### MEMBERSHIP

- Sawn Timber, Saw Logs and Wood Based Components Technical Committee (BCDC 6), of the Tanzania Bureau of Standards (TBS)
- Timber Structure Technical Committee (BCDC 12), of the Tanzania Bureau of Standards (TBS)
- Tanzania Association of Foresters (TAF)
- Researchers Academicians & Allied Workers Union (RAAWU)

### AWARDS

- TAFORI Best Worker - 2006, 2011 and 2017

### EXPERIENCE RECORD

**2016 To date:** Acting Director, Directorate of Forest Utilisation Research

#### Responsibilities

- To prepare financial and human resources estimates for the Directorate
- To prepare quarterly/annual reports on the Directorate's activities
- To conduct wood chemistry and physical research
- To supervise research activities in the Directorate
- To publish research results in recognised journals

2009 – 2015: Research Officer I

**Responsibilities**

- Carry out all activities assigned by the Director of Forest Utilization Research for the Directorate of Forest Utilization Research;
- Carrying out research on sustainable utilization of timber, wood based boards and non-timber forest products, climate change vulnerability and adaptation, ecology, conservation, and management of village woodlands,
- Developing research proposals related to sustainable utilization of timber and non-timber forest products, climate change vulnerability and adaptation, ecology, conservation, and management of village woodlands,
- Enhancing partnerships and networking with national and international research and development organizations,
- Prepare Annual reports for the Directorate of Forest Utilization Research.

2004 – 2008: Research Officer II

**Responsibilities**

- Carry out all activities assigned by the Director of Forest Utilization Research;
- Carrying out research on sustainable utilization of timber, wood based boards and non-timber forest products, climate change vulnerability and adaptation, ecology, conservation, and management of village woodlands,
- Developing research proposals related to sustainable utilization of timber and non-timber forest products, climate change vulnerability and adaptation, ecology, conservation, and management of village woodlands,

**SELECTED PUBLICATIONS**

- (i) **Balama, C.**, Augustino, S. Eriksen, S., and Makonda, F.B.S. (2017). The role of priority non-timber forest products in enhancing local adaptive capacity to climate change stresses in Kilombero district, Tanzania. *Climate and Development*, 9(3): 231-243, <http://www.tandfonline.com/doi/full/10.1080/17565529.2016.1167662>
- (ii) Msalilwa, U., Laswai, F., **Balama, C.**, Mbwambo, L. and Soka, G. (2016). The role of on-farm trees as an adaptation strategy to climate change effects around Mkingu Nature Forest Reserve in the Eastern Arc Mountains, Tanzania. *Tanzania Journal of Forestry and Nature Conservation*, 86(1): 35 – 52.
- (iii) **Balama, C.**, Augustino, S., Mwaiteleke, D., Lusambo, L.P. and Makonda, F.B.S. (2016). Economic valuation of non-timber forest products under the changing climate in Kilombero District, Tanzania. *International Journal of Forestry Research*. <https://www.hindawi.com/journals/ijfr/2016/7893143>.
- (iv) **Balama, C.**, Augustino, S. Eriksen, S., and Makonda, F.B.S. (2016). Forest adjacent households' voices on their perceptions and adaptation strategies to climate change in Kilombero District, Tanzania. *SpringerPlus*, <http://springerplus.springeropen.com/articles/10.1186/s40064-016-2484-y>
- (v) **Balama, C.**, Makatta, A.A., Maduka, S.M. and Tewele, C. (2015): Nutrient content of dried leaves of *Zanthoxylum chalybeum* Engl. growing in semi-arid areas of Iringa Region, Tanzania. *Tanzania Journal of Forestry and Nature Conservation*, 84(2): 13 – 22.
- (vi) Nuru, F., Msalilwa, U., Mbwambo, L. and **Balama, C.** (2015). Assessment of household charcoal consumption in urban areas: The case of Dar es Salaam City, Tanzania. *Tanzania Journal of Forestry and Nature Conservation*, 84(2): 22 – 32.
- (vii) Laswai, F., Mbwambo, L., Petro, R., Mpiri, A., **Balama, C.**, Msalilwa, U., Faraji, N. and Nyaradani, G. (2015). Some physical and strength properties of immature *Pinus patula* trees in Iringa and Njombe regions, Tanzania. *Journal of Forestry and Nature Conservation* 84(2): 5 - 12.
- (viii) Petro, R., Laswai, F., Mijai, M., Nyaradani, G. and **Balama, C.** (2015). Factors Affecting Tree Husbandry and Woodlots Establishment in Kilimanjaro Region, Tanzania. *Open Journal of Soil Science* 5: 169-180.
- (ix) Petro, R., Laswai, F., Mijai, M., Nyaradani, G. and **Balama, C.** (2015). A Review on Tree Species Suitability for Wood Fuel in Kilimanjaro Region. *Journal of Environment and Earth Science* 5(7): 23 – 27.
- (x) **Balama, C.**, Augustino, S., Eriksen, S., Makonda, F.B.S. and Amanzi, N. 2013. Climate change adaptation strategies by local farmers in Kilombero District, Tanzania. *Ethiopian Journal of Environmental Studies and Management*, 6: 724 – 737.
- (xi) **Balama, C.**, Gillah, P.R. and Mbwambo, L. 2012. Some physical and strength properties of chipboards available in Tanzania markets. *Tanzania Journal of Forestry and Nature Conservation*, 82(1): 1 – 12.

- (xii) Bakengesa, S. **Balama, C.** and Mpiri, A. 2011. Economic implications of insect pests and diseases in forest plantations in Tanzania. In: *Proceeding of the Insect Pests, Diseases and Soil Problems in Forest Plantations Workshop* Edited by Nshubemuki, L. *et al.*). Morogoro. pp 58 - 63.
- (xiii) **Balama, C.**, Petro, R., Uisso, A. and Magulukwenda, G. 2009. The role of women in gum trading towards poverty reduction and sustainable forest management in Kishapu and Igunga Districts, Tanzania. In: *Proceeding of the First Participatory Forest Management (PFM) Research Workshop* Edited by Nshubemuki, L. *et al.*). pp 80 – 90.
- (xiv) Mturi, F.A., Mbwambo, L., Nshubemuki, L., **Balama, C.**, Kapinga, C. and Sulemani, H.O, 2006. Resource status, utilization and socio-economic importance, of Commiphora tree species in Iramba, Karatu and Mbulu Districts, Tanzania. In: Nikundiwe, A. M and JDL, Kabigumila (Eds.), 2006. Proceedings of the RPSUD Workshop, June 2006 Arusha Tanzania, P. 264 – 271.
- (xv) Mbwambo, L., Mndolwa, M. A., Petro, R., **Balama, C.** and Mugasha, W. 2006. *Boswellia neglecta*: A neglected source of valuable resin (FRANKINCENSE) for rural economy in Tanzania. In: Nikundiwe, A. M. and J. D. L., Kabigumila (Eds.), 2006. Proceedings of the RPSUD Workshop, June 2006 Arusha Tanzania, P. 257-263.
- (xvi) Mbwambo, L., Mndolwa, M., Gillah, P.R., **Balama, C.** and Kitojo. D.H. 2006. Some wood properties and utilization of five tree species grown under agroforestry system in Shinyanga and Coast Region. In: *Proceeding of the Second National Agroforestry and Environment Workshop Proceedings.* (Edited by Chamshama, S.A.O. *et al.*). pp. 164-170.
- (xvii) **Balama, C.** and Shemwetta. D.T.K. 2005. Working methods by small scale logging contractors. A case of Sao Hill Forest Plantation. *TAFORI Newsletter Vol. 5(1)*. pp. 26-32.

#### PhD Thesis

**Balama, C.** 2016. Non-timber Forest Products for Climate Change Adaptation around Iyondo Forest Reserve in Kilombero District, Tanzania. 212pp.

#### MSc. Dissertation

**Balama, C.** 2009. Physical and Mechanical Properties of some Wood-Based Boards available in Tanzania Markets. MSc. Dissertation, Sokoine University of Agriculture, Morogoro, Tanzania. 110pp.

#### CONSULTANCY

- (i) Mbwambo, L., **Balama, C.**, Kagosi, P., Laswai, F., Tewele, C., Msalilwa, U. and Ernest, S (2016). Impact of tobacco farming on beekeeping in Kigoma Region, Tanzania. Final Report Submitted to Belgian Development Agency, Dar Es Salaam. 46pp.

#### TASK FORCE ASSIGNMENTS

- (i) Nashanda, E., **Balama, C.** and Mboya, M. (2017). Assessment of Alien Invasive Trees Proposed to be Eradicated in Mkingu Nature Forest Reserve and Kimboza Forest Reserve, Tanzania. Final Assignment Report Submitted to Tanzania Forest Service (TFS) Agency, Eastern Zone, Kibaha, Pwani. 42pp.
- (ii) Maggid, A.D., **Balama, C.** Salasala, N., Mgogo, A. Kilemile, A. and Solomon, U. (2017). Survey of Primary Wood Based Industries in Tanzania. Final Assignment Report Submitted to Tanzania Forest Service (TFS) Agency, Dar es Salaam. 81pp.
- (iii) Otieno, J.E., Magayane, M., Kihyo, S., **Balama, C.**, Chiganga, K.M. and Assenga, A. (2016). Quality of Eucalyptus Poles Production and Their Performance towards Meeting the Local and Export Market at Sao Hill Forest Plantation, Iringa. Final Assignment Report Submitted to Tanzania Forest Service (TFS) Agency, Dar es Salaam. 50pp.

#### TECHNICAL REPORTS/EDITED REPORTS

- (i) **Balama, C.**, Makatta, A.A. Maduka, S.M. and Tewele, C. 2013. Promotion of under-utilized edible tree-vegetable [*Zanthoxylum chalybeum* Engl.] as livelihood adaptation strategy to climate change effects by communities in semi-arid areas, Irina, Tanzania. Progress Report Submitted to the Tanzania Forest Fund, Dar Es Salaam. 36pp.
- (ii) Mbwambo, L., **Balama, C.**, Richard, J. and Laswai, F. 2013. Assessing vegetation recovery following flowering and massive death of bamboo in the Udzungwa Scarp Forest Reserve, Kilolo District, Iringa, Tanzania. Final physical and financial report (project number: 83/2010/RS/UD) submitted to the Eastern Arc Mountains Conservation Endowment Fund (EAMCEF), Morogoro. 24pp.

- (iii) **Balama, C.**, Majembe, A., Kalema, H. and Mhoro, E. 2010. Ecological survey at Bunduki Gap, Uluguru Nature Reserve, Mvomero District Tanzania. Report submitted to Wildlife Conservation Society of Tanzania, Dar es Salaam. 43pp.
- (iv) Nshubemuki, L., Madoffe, S.S., Chamshama, S.A.O., Bakengesa, S. and **Balama, C.** (Editors). 2011. *Proceeding of the Insect Pests, Diseases and Soil Problems in Forest Plantations Workshop: 3<sup>rd</sup> – 4<sup>th</sup> February, 2011, Kibaha, Tanzania.*
- (v) Nshubemuki, L., Chamshama, S.A.O., Mbwambo, L. and **Balama, C.**, (Editors). 2009. *Proceeding of the First Participatory Forest Management (PFM) Research Workshop: Partnerships participatory Forest Management for Improved Forest Quality, Livelihood and Governance.* 15<sup>th</sup> -16<sup>th</sup> December 2008, Morogoro, Tanzania. 225pp.
- (vi) Mbwambo, L., Nshubemuki, L., **Balama, C.**, Richard, J. and Lasway, F. 2009. The status, extent and management of invasive bamboo species in the Eastern Arc Mountain, a case of Udzungwa Scarp Forest Reserve, Kilolo District, Iringa. The report submitted to the Eastern Arc Mountains Endowment Fund (EAMCEF). 32pp.
- (vii) Kapinga, C., **Balama, C.**, and Mbwambo, L. 2009. Analysis of marketing chain of sawn-wood from Mufindi District to Dar-es-salaam City and Arusha Municipality. Report submitted to TAFORI. 72pp.
- (viii) Mbwambo, L., **Balama, C.**, Richard, J., Nyamoga, G. and Haule, H. 2008. The current status of *Rubus spp.* In Uluguru South Forest Reserve Morogoro, Tanzania. Report submitted to the Regional Catchment Forestry Project Manager, Morogoro. 15pp.
- (ix) Macrice, A.S., Richard, J., **Balama, C.**, Mpanda, M. and Edward, E. 2008. Management and control options for *Cedrela odorata*, a potential invasive woody species in Kimboza Forest Reserve, Morogoro Tanzania.
- (x) John, J., **Balama, C.** and Edward, E. 2008. Is the Uluguru mountain safe following introduction of alien plant species in boundary and gap planting? The report submitted to the Tropical Biology Association (TBA). 14pp.

#### WORKSHOP / TRAINING / SEMINARS ATTENDED

- (i) Training for professionals on carbon markets and development of Project Idea Note (PIN) and Project Design Document (PDD) held from 24<sup>th</sup> to 28<sup>th</sup> March, 2014, at Olmotonyi Sokoine University of Agriculture Training Centre, Arusha.
- (ii) Training course on multivariate data analysis, conducted by Aarhus University of Denmark in collaboration with Sokoine University of Agriculture from 8<sup>th</sup> to 13<sup>th</sup> January, 2013, at ICE Hall, Sokoine University of Agriculture, Morogoro.
- (iii) Training course on GIS and remote sensing applications with integrated Lidar data and ground based inventories for forest biomass mapping from 2<sup>nd</sup> to 14<sup>th</sup> November, 2011, at ICE Hall, Sokoine University of Agriculture, Morogoro.
- (iv) Workshop on Reduced Emission from Deforestation and forest Degradation (REDD) related research and capacity building in Tanzania: Opportunities for synergy with other initiatives: Workshop organized by SUA, Faculty of Forest and Nature Conservation at OASIS Morogoro 31<sup>st</sup> August – 3<sup>rd</sup> Sept 2009.
- (v) Darwin Initiatives Training Workshop on Key Steps in Managing Alien Plants in Tanzania, 1<sup>st</sup> -2<sup>nd</sup> February 2008. Dar es Salaam Tanzania.
- (vi) The Second National Agroforestry and Environment Workshop. Partnerships and linkages for greater impact in agroforestry and environment awareness, 14-17<sup>th</sup> March 2006, Mbeya Tanzania.
- (vii) Training Workshop on Ecology, Risk Assessment and Management of Invasive Alien Plants, organized by Darwin Initiatives 14-18<sup>th</sup> May 2007 Amani Nature Reserve, Muheza Tanga.
- (viii) Specialist Training Workshop on Proposal Writing Skills and Communicating Scientific Results, workshop organized by Tropical Biology Association (TBA) 23<sup>rd</sup> – 26<sup>th</sup> August 2005, Sokoine University of Agriculture, Morogoro.
- (ix) AGORA / TEEAL Training Workshop at COSTECH, Dar es Salaam on 22<sup>nd</sup> – 25<sup>th</sup> November 2004.

#### COUNTRIES VISITED

- Botswana (2009), Chile (2010), Finland (2017), Kenya (2006, 2007, 2017), Norway (2012), South Africa (2008), Sweden (2008), and Uganda (2009).



SIGNATURE:

NAME: **Dr. Chelestino Peter Balama**

DATE: November, 2017.