

# **CURRICULUM VITAE**

## **(A) PERSONAL DETAILS**

**NAME** : GITAU Wilson  
**MARITAL STATUS** : Married with children  
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## **(B) CAREER DETAILS**

### **B1. CAREER OBJECTIVE**

To utilize the vast knowledge and practical skills in mentoring the students on various aspects of atmospheric science especially in physical climate system; climate processes; weather and climate monitoring; modeling of earth-atmosphere-ocean interactions; and undertake research and consultancy on the same.

### **B2. SUMMARY OF ACADEMIC QUALIFICATION**

2007 – 2011: PhD (Meteorology). Studied under International joint-supervision between Universite de Bourgogne in France and University of Nairobi in Kenya

2002 – 2005: M.Sc. (Meteorology), University of Nairobi

December 2002: KASNEB Certified Public Accountant (CPA), section I part I

1997 – 2001: B.Sc. (Meteorology), Second class honors, Upper division, University of Nairobi

1997 – 2001: Additional courses taken at undergraduate level: Mathematics and Physics

1992 – 1995: KCSE: Grade B Plain, Loreto Nakuru Secondary School

1984 – 1991: KCPE: 60 points out of 84, Muriundu Primary School

## **(C) PROFESSIONAL WORK EXPERIENCE**

### **C1. JUNE 2012 – PRESENT: LECTURER, DEPT. OF METEOROLOGY, UoN**

- Teaching various units to the undergraduate and postgraduate students
- Co-supervision of the research for the final year undergraduate students and postgraduate students
- Undertake research on the intraseasonal characteristics of the rainfall

### **C2. MAY 2009 – JUNE 2012: TUTORIAL FELLOW, DEPT. OF METEOROLOGY, UoN**

- Teaching various units to the undergraduate students
- Co-supervision of the research projects for the final year undergraduate students
- Preparation of the laboratory practical manuals for the first year Bachelor of Science in Meteorology students

- Undertake research on diagnosis and predictability of the intraseasonal characteristics of wet and dry spells over equatorial eastern Africa

**C3. OCTOBER 2003 – MAY 2009: RESEARCH CONSULTANT, IGAD CLIMATE PREDICTION AND APPLICATION CENTRE (ICPAC)**

- Implementation and operationalisation of research findings on the characteristics of the daily rainfall occurrence as supplied by the alternating wet and dry spells during the wet seasons over Eastern Africa, their predictability and impacts on different socio-economic sectors
- Coordination and full participation in the development of empirical statistical models for seasonal rainfall and streamflow prediction preceding the Regional Climate Outlook Forums (RCOF) for the major rainfall seasons over the Greater Horn of Africa
- Training of climate scientists from the Greater Horn of Africa member countries attached at ICPAC on seasonal climate prediction and climate modeling
- Preparation of the decadal, monthly and climate watch bulletin for the institution as well as writing the technical and workshop reports

**(D) RESEARCH PROJECT EXPERIENCE AND ATTACHMENT**

**D1. RESEARCH PROJECTS**

1. **PICREVAT (2009 – 2013):** PICREVAT (Prévisibilité de l'Information Climatologique pour la Réduction de la Vulnérabilité de l'Agriculture Tropicale) is a project funded by the French National Research Agency (ANR) and implemented by several institutions. It aims at a better understanding of the multi-scale interaction between global-scale forcing and the local intra-seasonal variability, and further evaluates the potential application of the seasonal predictions on crops. This project compares three tropical and subtropical areas (Cameroon, Kenya-Tanzania and Argentina). I am involved in the study of the intra-seasonal rainfall variability over equatorial eastern Africa
2. **Flood risk mapping for Burundi (October – November 2007):** This was a project funded by WFP/FAO and implemented by ICPAC. I participated in the collection, analysis and generation of baseline climatic information to assess the flood risk over Burundi
3. **Climate change and human development in Africa: Assessing the risks and vulnerability of climate change in Kenya, Malawi and Ethiopia (May 2007):** This was a UNDP project implemented by ICPAC. I participated in the collection and analysis of baseline information to assess the vulnerability of Ethiopia to current and future climate extremes

**D2. PROFESSIONAL ATTACHMENT**

1. **Centre de Recherches de Climatologie (CRC) at Université de Bourgogne in France (May – July 2007; May – July 2008; July – September 2009).** I was attached to the above centre while undertaking research towards my PhD thesis under

International joint-supervision between Universite de Bourgogne in France and University of Nairobi in Kenya

### **D3. COMPUTER SOFTWARE AND HARDWARE**

1. Working knowledge of statistical packages – Systat, SPSS, Statistica, Instat, CPT
2. Working knowledge with other packages – Matlab Programming, Surfer, Climlab, Grid Analysis and Display System (GrADS)
3. Working experience with several operating systems – Linux, UNIX, Ms DOS, Ms Windows

## **(E) PUBLICATIONS**

### **E1. THESES AND RESEARCH PROJECT**

1. ‘Diagnosis and predictability of intraseasonal characteristics of wet and dry spells over Equatorial East Africa’, Ph.D. Thesis, *University of Nairobi and Universite de Bourgogne*, (2011)
2. ‘Characteristics of the wet and dry spells during the wet seasons over Kenya’, M.Sc. Thesis, *University of Nairobi*, (2005)
3. ‘The anomalous rainfall and its relationship with the lagged Sea Surface Temperatures (SSTs) over the Kenyan coastal region’, B.Sc. Research Project, *University of Nairobi*, (2001)

### **E2. PUBLICATIONS IN PEER REVIEWED JOURNALS**

1. Camberlin, P., **Gitau, W.**, Oettli, P., Ogallo, L. and Bois, B., 2014: Spatial interpolation of daily rainfall stochastic generation parameters over East Africa. *Climate Research*, **59**, 39 – 60
2. Ongoma, V., Muthama, J. N. and **Gitau, W.**, 2013: Evaluation of urbanisation influences on urban temperature of Nairobi City, Kenya. *Global Meteorology*, doi:10.4081/gm.2013.e1
3. Ongoma, V., Muthama, J. N. and **Gitau, W.**, 2013: Evaluation of Urbanization influences on urban winds of Kenyan Cities. *Ethiopian Journal of Environmental Studies and Management*, **6** (2), 223 – 231
4. **Gitau, W.**, Ogallo, L., Camberlin, P. and Okoola, R., 2013: Spatial coherence and potential predictability assessment of intraseasonal statistics of wet and dry spells over Equatorial Eastern Africa. *Int. J. Climat.*, **33**, 2690 - 2705
5. Oludhe, C., Ogallo, L., Ambenje, P., Atheru, Z. and **Gitau, W.**, 2011: Eastern Africa [in “State of the Climate in 2010”]. *Bull. Amer. Meteor. Soc.*, **92** (6), S194 – S196
6. Oludhe, C., Ogallo, L., Ambenje, P., Atheru, Z. and **Gitau, W.**, 2010: Eastern Africa [in “State of the Climate in 2009”]. *Bull. Amer. Meteor. Soc.*, **91** (7), S154 – S156

7. Camberlin, P., Moron, V., Okoola, R., Philippon, N. and **Gitau, W.**, 2009: Components of rainy seasons variability in Equatorial East Africa: Onset, cessation, rainfall frequency and intensity. *Theor. and Appl. Climatol.*, **98(3-4)**, 237 – 249
8. Githui, F., **Gitau, W.**, Mutua, F. and Bauwens, W., 2008: Climate change impact on SWAT simulated streamflow in Western Kenya. *Inter. J. Climatol.*, **29(12)**, 1823 – 1834
9. **Gitau, W.**, Ogallo L. A. and Mutemi, J. N., 2008: Intraseasonal characteristics of wet and dry spells over Kenya. *J. Meteorol. and Related Sciences.*, **2(1)**, 18 – 28

### **E3. CONFERENCE AND WORKSHOP PROCEEDING PAPERS**

1. **Gitau, W.**, 2012: Spatial coherence and potential predictability assessment of intraseasonal statistics of wet and dry spells over Equatorial Eastern Africa. *Presented at workshop on “Predictability of climatic information to reduce the vulnerability of Tropical Agriculture”*. Izaak Walton Inn, Embu, Kenya, 20 – 24 February 2012
2. **Gitau, W.**, 2008: Trends of the intra-seasonal statistics of daily rainfall over East Africa. *Presented at conference on African drought: Observations, Modeling, Predictability and Impacts*. ICTP-UNESCO, Trieste, Italy, 2 – 6 June 2008
3. **Gitau, W.**, 2005: Influence of the wet spells on the Lake Levels. *Presented at Young Water Professionals (YWP) workshop in support of the 4<sup>th</sup> World Lake Conference, KCCT, Mbagathi, Nairobi, 10 – 13 October 2005*
4. **Gitau, W.**, 2003: Towards the stabilization of price and income from agricultural products. *Presented at Weather Risks and Actuarial Valuation (WRAV) Workshop, Chiromo Campus, University of Nairobi, 23 – 25 September 2003*

### **E4. LIST OF CONFERENCE AND WORKSHOP ATTENDED (in the last six years)**

1. 2014: Thirty-seventh International Forum on Seasonal Climate Outlook for the Greater Horn of Africa: 25 – 26 May 2014, Grand Holiday Villa Hotel & Suites, Khartoum, Sudan
2. 2014: Thirty-sixth International Forum on Seasonal Climate Outlook for the Greater Horn of Africa: 26 – 28 February 2014, Imperial Botanical Beach Hotel, Entebbe, Uganda
3. 2013: Thirty-third International Forum on Seasonal Climate Outlook for the Greater Horn of Africa. 18 – 20 February 2013, Hotel club du Lac Tanganyika, Bujumbura, Burundi
4. 2012: Training on PhD supervision workshop. 26 – 28 November 2012, CCU, University of Nairobi, Nairobi, Kenya
5. 2012: Thirty-second International Forum on Seasonal Climate Outlook for the Greater Horn of Africa. 29 – 31 August 2012, Zanzibar Beach Hotel, Zanzibar, Tanzania
6. 2012: Thirty-first International Forum on Seasonal Climate Outlook for the Greater Horn of Africa. 29 – 30 May 2012, Djibouti Palace Kempinski, Djibouti, Djibouti

7. 2012: Grant and proposal writing training workshop. 19 – 23 March 2012, CCU, University of Nairobi, Nairobi, Kenya
8. 2012: International PICREVAT workshop on Predictability of climatic information to reduce the vulnerability of Tropical Agriculture. 20 – 24 February 2012, Izaak Walton Inn, Embu, Kenya
9. 2011: Regional conference on Enhancing Climate-Related Information Access for improving Food System Planning and Coordination in East Africa. 25 – 26 October 2011, Mount Meru Hotel, Arusha, Tanzania
10. 2011: International Capacity Building workshop on Using Climate Scenarios and Analogues for designing Adaptation Strategies in Agriculture. 19 – 23 September 2011, Hotel Yak & Yeti, Kathmandu, Nepal
11. 2011: International workshop on FAO Climate change impact assessment toolbox “called FAO-MOSAICC (for **MO**delling **S**ystem for **A**gricultural **I**mpacts of **C**limate **C**hange)”. 18 – 19 February 2011, FAO Headquarters, Rome, Italy
12. 2010: Twenty-sixth International Workshop on Pre-Forum Capacity Building Training Workshop on Seasonal Forecasting for the September-December 2010 Seasonal Rainfall in the Greater Horn of Africa. 23 August – 1 September 2010, ICPAC, Nairobi, Kenya
13. 2008: Integrated space technology applications for monitoring climate change impact on agricultural development and food security workshop. 1 – 5 December 2008, Nairobi Safari Club, Nairobi, Kenya
14. 2008: Twenty-second International Forum on Seasonal Climate Outlook for the Greater Horn of Africa. 28 – 29 August 2008, Nairobi Safari Club, Nairobi, Kenya
15. 2008: Conference on African Drought: Observations, Modeling, Predictability, Impacts. 2 – 6 June 2008, International Centre of Theoretical Physics (ICTP), Trieste, Italy
16. 2007: Second stakeholder workshop on the establishment of a country collaborating centre for Malaria Early Warning Systems (MEWS). 5 – 7 December 2007, Mombasa Beach Hotel, Mombasa, Kenya
17. 2007: Training workshop on application of satellite based vegetation and related data in Environmental Monitoring. 24 September – 5 October 2007, ICPAC, Nairobi, Kenya
18. 2007: Capacity building workshop for Africa on regional climate modeling using PRECIS (**P**roviding **R**egional **C**limates for **I**mpacts **S**tudies). 10 – 14 September 2007, ICPAC, Nairobi, Kenya

## **(F) SUPERVISION**

### **F1. MASTERS OF SCIENCE DISSERTATION**

1. Emily Nyaboke Bosire (I56/66157/2010): Dissertation title, “*Assessment of the predictability of rainfall on seasonal time scales over East Africa using the climate forecast system model*”. Supervised to completion, June 2012.

2. Victor Ongoma (I56/65559/2010): Dissertation title, “*Evaluation of Urbanisation influences on Urban Climate of Kenyan Cities*”. Supervised to completion, June 2012.
3. Abdimajid Nunow Abdi (I54/76260/2012): Dissertation title, “*Impact of Climate Refugees on the Humanitarian Situation: A case study of Dadaab Refugee Camp*”. Supervised to completion, November 2013.
4. Eunice Koech (I56/83752/2012): A Master of Science dissertation of the University of Nairobi. *Ongoing*

## **F2. DOCTOR OF PHILOSOPHY THESIS**

1. Emily Bosire, I80../2013. A Doctor of Philosophy thesis of the University of Nairobi. *Ongoing*

## **(G) OTHER UNIVERSITY DUTIES AND RESPONSIBILITIES**

### **G1. COLLEGE LEVEL**

At the College of Biological and Physical Science (CBPS),

- (i) I am currently the college web champion for the Department of Meteorology
- (ii) I am currently an active member of College Timetabling Committee
- (iii) I have previously been an active member of College Health and Safety Committee

### **G2. SCHOOL LEVEL**

At the School of Physical Sciences (SPS),

- (i) I am currently the Chairman, CCS 010 HIV/AIDS course committee;
- (ii) I have previously served as an active member, Postgraduate seminar committee

### **G3. DEPARTMENT LEVEL**

Within the Department of Meteorology, I am an active member of the workload and timetabling committee

## **(H) SCHOLARLY AWARDS, MEMBERSHIP AND COMMUNITY SERVICE**

### **H1. SCHOLARLY AWARD**

1. Nominated and awarded the Government of France scholarship through the Embassy of France in Kenya to undertake research experiments at Centre of Research in Climatology (CRC) at Universite de Bourgogne in Dijon for three years (October 2006 – September 2009) for Doctoral research under international joint-supervision
2. Nominated and awarded the University of Nairobi Postgraduate Scholarship to undertake postgraduate (Master of Science) studies for two years (October 2002 – September 2004)

### **H2. MEMBERSHIP**

1. The Vice-chair person of Kenya Meteorological Society (KMS)
2. An active Member of the Seasonal Rainfall Prediction and Climate Modeling Research Group of IGAD Climate Prediction and Applications Centre (ICPAC)

3. A member of the KMS bulletin (Weather and Climate) committee.
4. A pioneer member of the Africa Journal of Physical Sciences (AJPS) for the School of Physical Sciences (SPS) of University of Nairobi.

### **H3. COMMUNITY SERVICE**

1. I was the pioneer chairman of the Chiromo Catholic Students' Community, where I initiated and facilitated fund-raising for the acquisition of the musical instruments.
2. I am trained in first-aid by the St. John Ambulance (Courtesy of CBPS). Led a group of six trainees appointed from the college by the Principal to learn first-aid skills that are quite essential in time of emergence everywhere.

### **(F) REFEREES**

- ❑ Alfred O. Opere, PhD  
Chairman and Senior Lecturer  
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University of Nairobi  
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- ❑ Professor John N. Muthama, PhD  
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- ❑ Raphael E. Okoola, PhD  
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