CURRICULUM VITAE



1.0 PERSONAL DETAILS

Full Name
Date of birth
Place of birth;
Nationality;
Marital status;
Sex;

Address;

Samwel Mchele Limbu August 20, 1979 Nyamagana Tanzanian Married Male Samwel Mchele Limbu Department of Aquatic Sciences and Fisheries Technology College of Agricultural Sciences and Fisheries Technology University of Dar es Salaam, P.O. Box 60091 Dar es Salaam TANZANIA. Phone: +255 22 2410462 Fax: +255 22 2410480/2650244 Mobile: +255 784/655/0766 600922 emails: <u>limbu@udsm.ac.tz</u> mchelelimbu@yahoo.com, limbumchele@gmail.com

2.0 ACADEMIC PROFESSIONAL QUALIFICATION

2.1 EDUCATION BACKGROUND

Qualification			Dates		Universities/Schools			
Ph.D.	(Aquaculture	Nutrition	and	2015	_	East	China	Normal
Environn	nental Health)			2020		Universi	ity, Shangha	u, China
M.Sc . (A	quaculture Nutriti	ion)		2009 - 20	010	Universi Scotland	ity of United Ki	Stirling,
B.Sc (F	isheries and Aqu	uaculture 1 st (Class	2004 - 20	007	Universi	ity of Dar e	s Salaam
with Hor	nours)	accurace, i	Ciuss	2001 20	507	Tanzania	a	5 Suluill,
Form Six	Certificate (PCB))		2000 - 20	003	Tarime Mara, Ta	Secondary anzania	School,

Form Four Certificate (Science and Arts)	1996 - 1999 Magu Day Secondary School, Mwanza, Tanzania
2.2 ACADEMIC PRIZES AND AWARD	S
Best Graduating Student for the 2020 Class	Awarded as one of the Best Graduating Students with good academic records, active in cultural activities and outstanding performance for 2020 East China Normal University Graduating Students.
Alumni Messenger of 2020 Graduates	Appointed as an Alumni Messenger of 2020 graduate of East China Normal University.
Best Poster Award	Awarded a Best Poster during The Twelfth Symposium of World's Chinese Scientists on Nutrition and Feeding Finfish and Shellfish in Zhengzhou, China held from 14 th to 18 th October 2019.
Outstanding African Student in China	The Best African Student in China awarded by the Pride of Asian Pacific Awards 2019.
Best Journal Researcher at University level	Winner at the University Level as the Best Researcher with the highest number of Publications during the fifth University of Dar es Salaam Research week held between 6 th to 8 th May, 2019.
Outstanding Academic Performance	Recognized by the Vice Chancellor of the University of Dar es Salaam (Prof. William L. Anangisye) and the University community for the outstanding academic performance during PhD studies at East China Normal University by publishing eleven articles and three chapters in a book in the 2017/2018 academic year.
Excellent International Student Scholarship	Best student in International Studies programs at East China Normal University for the Academic year 2017/2018.
Best Researcher at College of Agricultural Sciences and Fisheries Technology	Winner at the College Level as the Best Researcher who has excelled in Publications during the Third University of Dar es Salaam Research week held between 10 th and 12 th May, 2017.
Chinese Government Outstanding Internation	nal
Student Scholarship	Best student in International Studies programs at East China Normal University for the year 2017.

Best African Student Abstract Award	A winner of AquaFish Innovation Lab Best African Student Abstract Award for the World Aquaculture 2017 Conference held on June 26- 30, 2017 - Cape Town, South Africa
Excellent International Student Scholarship	Best student in International Studies programs at East China Normal University for the Academic year 2015/2016.
Chinese Government Scholarship	Awarded a scholarship by the Chinese Council Scholarship to pursue Ph.D. at East China Normal University in Shanghai (2014 to 2019).
External Examiners Prize	Student with a good quality report in M.Sc. Sustainable Aquaculture 2009/2010 at Stirling University.
World Bank Scholarship	Awarded a scholarship by the University of Dar es Salaam to pursue M.Sc. at the University of Stirling in Scotland, UK under the World Bank Project "Science and Technology Higher Education" component CIA: 5.1 (2009 to 2010).
University Prize	Best student in final degree examination in the Faculty of Aquatic Sciences and Technology (2006/2007) at University of Dar es Salaam.
Dr. Tamatamah's Prize;	Student with the Highest GPA (above 3.8) in the Department of Fisheries and Aquaculture (2005/2006) at University of Dar es Salaam.
Faculty Prize;	Student with the Highest GPA in the Department of Fisheries and Aquaculture (2004/2005) at University of Dar es Salaam.
The Vice-Chancellor's Prize;	Best student in the first year degree examinations in the Faculty (2004/2005) at University of Dar es Salaam.

3.0 POSTS HELD AT THE UNIVERSITY OF DAR ES SALAAM

3.1 ACADEMIC	
Lecturer	30 th November 2016 To date.
Assistant Lecturer	1 st September 2010 to 29 th November 2016.
Tutorial Assistant	7 th March 2008 to 31 st August 2010.

3.2 ACADEMIC POSTS HELD OUTSIDE THE UNIVERSITY OF DAR ES SALAAM

Editorial Board Member

- Associate Editor, Journal of Applied Aquaculture from 03/02/2021 to date.
- Review Editor in Frontiers in Tropical Diseases Antimicrobial Resistance from 26/11/2020 to date:
- Review Editor for Frontiers in Animal Science and Production Product Quality from 2019 to date:

Occasional Peer Reviewer – Lakes & Reservoirs: Science, Policy and Management for Sustainable Use, Aquaculture, Reviews in Aquaculture, Science of the Total Environment, Tanzania Journal of Science, Genomics, Journal of Applied Aquaculture, African Journal of Aquatic Sciences, Annals of the Brazilian Academy of Sciences, Asian Aquaculture, Egyptian Journal of Aquatic Research, International Journal of Veterinary Science and Medicine, Journal of Microscope and Ultrastructure, PLOS ONE, Journal of Hazardous Materials, Aquaculture Reports, Aquaculture Research, Food Research International, Aquaculture Nutrition, Scientific African

3.3 ADMINISTRATIVE

- Acting Head, Department of Aquaculture Technology 2020/2021 to date.
- Coordinator for Research, Consultancy and Publication for the School of Aquatic Sciences and Fisheries Technology 2018/2019 to 2020/2021.
- Coordinator for Infrastructure Development for the School of Aquatic Sciences and Fisheries Technology 2018/2019 to 2020/2021.
- Assistant ARIS Coordinator and Examination Officer for the Department of Aquatic Sciences and Fisheries Technology 2010 to 2015.
- Assistant Departmental Timetable Officer for the Department of Aquatic Sciences and Fisheries Technology 2010 to 2011.

3.4 ADMINISTRATIVE POSTS HELD OUTSIDE THE UNIVERSITY OF DAR ES SALAAM

- ✓ Chairperson of the Tanzania Students' Associations Federation In China (TASAFIC) committee on awards 2019 2020.
- ✓ Chairperson, Association of Tanzanians in Shanghai (ATS) 2015 2017.
- ✓ Deputy Secretary General, Association of Tanzanians in Shanghai (ATS) 2014 2015.
- ✓ Chairperson, The Livingstone Academy School Board (Zanzibar) 2009.
- Chairperson, Faculty of Aquatic Sciences and Technology (Dar es Salaam University Students Organization) 2006 – 2007.
- ✓ Member, Faculty of Aquatic Sciences Board (University of Dar es Salaam) 2006 2007.
- ✓ Member, University of Dar es Salaam Students Representative Council 2005 2007

5.0 RESEARCH, TEACHING AND CONSULTANCY EXPERIENCE

5.1 RESEARCH

From December 2020 to date I am participating in a project titled "Assessment of antibiotic residues in commonly consumed marine fish and potential human health risk along the Tanzanian coast".

From November 2020 to date I am participating in a project titled "Increased Urban Tilapia Farming by Developing Recirculating Aquaculture System (RAS) Technology".

From June 2016 to 2020, participated in a research titled **"Benefits and Risks of Antibiotics on Fish"**.

From June 2012 to 2016 participated in a research titled "**Integrating Agriculture and Aquaculture for Increased Farm Productivity**" under a government funding through Tanzania Commission for Science and Technology (COSTECH).

M.Sc. Final Year Project;	April 2010-June 2010
Site;	SCAPA FISH FARM UGANDA
Title;	"Practical feed formulation and growth performance of
	African catfish Clarias gariepinus Burchell, 1822 in

Uganda

From May 2008 to July 2009 worked with CRTR (**Coral Reef Targeted Research**) Project where my role was to assess the availability of phytoplankton on sites overlying the coral reefs.

B.Sc. Final Year Project;	September 2006-May 2007
Site;	Kunduchi
Title;	"Effect of Sewage on Growth and Survival
	of Terebralia palustris in planted
	Mangroves at Kunduchi"

From July 2006 to April 2008, worked with "PUMPSEA" **Peri-Urban Mangrove forests as filters and potential Phytoremediators of domestic Sewage in East Africa'**, where my role is to study the effect of domestic sewage on macro fauna.

From 29th January to 21st February 2008[,] I was involved in collection of data by the National Environment Management Council of Tanzania for a Research titled **''State of the Coast''**

where my role was to collect data concerning Coral reefs, Fisheries, Water Quality, Shoreline change and Other Living Resources in Mtwara, Lindi and Kilwa Districts by asking questions to fishers in two villages per District.

From 5th September 2007 to 4th October 2007, I was involved in collection of data by the University of Dar es Salaam for a Research titled "**Biodiversity Inventory of Riverine Fishes of Tanzania: The case Study of Umba, Pangani, Msagasi, Wami, Ruvu, Ruaha and Bubu Rivers**" where my role was to fish in rivers to get specimens and do clearance for foreigners' researchers in Regional and District offices.

5.2 TEACHING

Undergraduate courses

AF 208: Fish Nutrition and Feed Technology,

AF 301: Aquaculture Systems,

AF 315: Aquaculture Genetics and Seed Production,

AF 207: Swimming and Snorkeling,

BIO 352: Aquatic Biology (Part time at Muslim University of Morogoro) (2014/2015)

In all courses, lectured and administered examinations and examined all grades.

5.3 UNDERGRADUATE DISSERTATIONS

Supervised and examined:

Undergraduate

- 1. Omary, R. R. 2014. The effect of temperature on growth of *Kappaphycus alvarezii* and *Eucheuma denticulatum*.
- Ngonyani, H. 2014. Dynamics of nitrogen and phosphorus among secondary treatment pond, sub surface flow constructed wetland treatment and waste water fedaquaculture pond in Morogoro.
- Ewald, R. 2013. Comparative study on growth performance of Nile tilapia (*Oreochromis niloticus*) fed with pelleted and meal feeds. Final year (B.Sc.) Fisheries and Aquaculture project report. 31 pp.

- Jumanne, K. 2013. The effect of feeding regime on *Oreochromis niloticus* growth performance, survival and feed utilization cultured in tanks. Final year (B.Sc.) Fisheries and Aquaculture project report. 27 pp.
- Samwel, P. E. 2013. The determination of the rate of plankton production by using different organic fertilizers in fish ponds. Final year (B.Sc.) Fisheries and Aquaculture project report. 36 pp.
- Fransis, C. 2012. Effect of organic and inorganic fertilizers on the growth performance of *Oreochromis niloticus* in aquaculture tanks. Final year (B.Sc.) Fisheries and Aquaculture project report. 34 pp.
- Erastus, R. 2012. Determination of protein and lipids contents in *Siganus sutor* and *Oreochromis niloticus*. Final year (B.Sc.) Fisheries and Aquaculture project report. 29 pp.
- John, M. 2011. A comparison of phosphate, ammonia and dissolved oxygen (DO) levels between Msimbazi and Kizinga Rivers. Final year (B.Sc.) Wildlife Science and Conservation project report. 35 pp.
- Mtaki, K. 2011. Analysis of water quality parameters in pond culture of Nile tilapia (*Oreochromis niloticus* L.) at village museum. Final year (B.Sc.) Aquatic Environmental Science and Conservation project report. 22 pp.
- Richard, I. 2011. The abundance and diversity of epifauna on Seagrassess of Mjimwema at Kigamboni. Final year (B.Sc.) Aquatic Environmental Science and Conservation project report. 20 pp.

5.4 CONSULTANCY

Evaluation on improving marine fish farming in Mtwara district, phase I. Report submitted to SWISSAID Tanzania.

6.0 MEMBERSHIP IN INTERNATIONAL/NATIONAL BODIES

- ✓ February 2020 to date; Member, Tanzania Development Social Group (TADESO), Twende na Magufuli TZA.
- ✓ June 2016 to date; Member Tanzanian Young Academy of Science under Tanzania Academy of Sciences (TAAS).

- ✓ 2010 to date; Member Sustainable Aquaculture Research Networks in Sub Saharan Africa (SARNISSA).
- ✓ 2008 to date; Member Western Indian Ocean Marine Science Association (WIOMSA).

7.0 PUBLICATIONS IN PEER REFEREED JOURNALS AND BOOKS

7.1 Publications in Peer Refereed Journals

- 7.1.1 Ling-Yu Li, Yue Wang, <u>Samwel Mchele Limbu</u>, Jia-Min Li, Fang Qiao, Li-Qiao Chen, Mei-Ling Zhang and Zhen-Yu Du (2021). Reduced fatty acid β-oxidation improves glucose catabolism and liver health in Nile tilapia (*Oreochromis niloticus*) juveniles fed a high-starch diet. *Aquaculture*, 535 (2021) 736392. https://doi.org/10.1016/j.aquaculture.2021.736392.
- 7.1.2 Si-Lan Han, Yan Liu, <u>Samwel M. Limbu</u>, Li-Qiao Chen, Mei-Ling Zhang and Zhen-Yu Du (2020). The reduction of lipid-sourced energy production caused by ATGL inhibition cannot be compensated by activation of HSL, autophagy, and utilization of other nutrients in fish. *Fish Physiology and Biochemistry*, <u>https://doi.org/10.1007/s10695-020-00904-7</u>.
- 7.1.3 <u>Samwel Mchele Limbu</u>, Liqiao Chen, Meiling Zhang and Zhen-Yu Du (2020). A global analysis on the systemic effects of antibiotics in cultured fish and their potential human health risk: A review. *Reviews in Aquaculture*, <u>https://doi.org/10.1111/raq.12511</u>.
- 7.1.4 Dahai Gu, Jingying Zhao, <u>Samwel Mchele Limbu</u>, Yunan Liang, Junming Deng, Baoliang Bi, Lingfu Kong, Hui Yan, Xiaowen Wang, Qing Hu, Yu Gao, Dan Jia, and Hua Rong (2020). Arginine supplementation in plant-rich diets affects growth, feed utilization, body composition, blood biochemical indices and gene expressions of the TOR signaling pathway in juvenile Asian red-tailed catfish (*Hemibagrus wyckoiides*), *Journal of the World Aquaculture Society*, 1–18. https://doi.org/10.1111/jwas.12748.
- 7.1.5 Hua Rong, Fan Lin, <u>Samwel Mchele Limbu</u>, Zhideng Lin, Baoliang Bi, Tengfei Dou, Lei Zhao and Xiaobo Wen (2020). Effects of dietary proline on swim bladder collagen synthesize and its possible regulation by the TGF-β/Smads pathway in *Nibea diacanthus*. Aquaculture Nutrition, 26(5): 1792-1805. https://doi.org/10.1111/anu.13130
- 7.1.6 Ling-Yu Li, Jia-Min Li, Li-Jun Ning, Dong-Liang Lu, Yuan Luo, Qiang Ma, <u>Samwel Mchele Limbu</u>, Dong-Liang Li, Li-Qiao Chen, Irfan J. Lodhi, Pascal Degrace, Mei-Ling Zhang and Zhen-Yu Du (2020). Mitochondrial fatty acid β-oxidation inhibition promotes carbohydrate catabolism and protein deposition through energy homeostasis remodelling. *The Journal of Nutrition*, nxaa187, https://doi.org/10.1093/jn/nxaa187.
- 7.1.7 Mussa G. Mndeme, Amon P. Shoko, <u>Samwel M. Limbu</u> and Chacha J. Mwita (2020). Genetic diversity among Tilapia species farmed at Chita in Kilombero,

Morogoro Region, Tanzania. *Tanzania Journal of Science*, **46**(1): 31-41. http://196.44.162.39/journals/index.php/tjs/article/view/3277/3213.

- 7.1.8 Sheng-Xiang Sun, Jun-Lin Wu, Hong-Bo Lv, Hai-Yang Zhang, Jing Zhang, Samwel Mchele Limbu, Fang Qiao, Li-Qiao Chen, Yi Yang, Mei-Ling Zhang and Zhenyu Du (2020). Environmental estrogen exposure converts lipid metabolism in male fish to a female pattern mediated by AMPK and mTOR signaling pathways. *Journal of Hazardous Materials*, 394: 122537. https://doi.org/10.1016/j.jhazmat.2020.122537.
- 7.1.9 Ling-Yu Li, Dong-Liang Lu, Zhe-Yue Jiang, <u>Samwel Mchele Limbu</u>, Fang Qiao, Liqiao Chen, Meiling Zhang and Zhen-Yu Du (2020). Dietary L-carnitine improves glycogen and protein accumulation in Nile tilapia via increasing lipid-sourced energy supply: an isotope-based metabolic tracking. *Aquaculture Reports*, 17: 100302. https://doi.org/10.1016/j.aqrep.2020.100302
- 7.1.10 Atuganile Malambugi, Zhenzhen Yu, Wenbin Zhu, Lanmei Wang, Feibiao Song, <u>Samwel Mchele Limbu and</u> Zaijie Dong (2020). Effects of photoperiod on growth performance and melanogenesis pathway for skin pigmentation of Malaysian red tilapia. *Aquaculture Research*, 51(5): 1824-1833. <u>https://doi.org/10.1111/are.14531</u>.
- 7.1.11 Meiling Zhang, Chengjie Shan, Fang Tan, <u>Samwel Mchele Limbu</u>, Liqiao Chen and Zhen-Yu Du (2020). Gnotobiotic models: Powerful tools for deeply understanding intestinal microbiota-host interactions in aquaculture. Aquaculture, 517: 734800. <u>https://doi.org/10.1016/j.aquaculture.2019.734800</u>.
- 7.1.12 <u>Samwel M. Limbu</u>, Han Zhang, Yuan Luo, Meiling Zhang and Zhen-Yu Du (2020). High carbohydrate diet partially protects Nile tilapia from oxytetracycline-induced side effects. *Environmental Pollution*, 256: 113508. https://doi.org/10.1016/j.envpol.2019.113508
- **7.1.13** <u>Limbu, S.M., (2020)</u>. The effects of on-farm produced feeds on growth, survival, yield and feed cost of juvenile African sharptooth catfish (*Clarias gariepinus*). Aquaculture and Fisheries, **5**(1): 58-64. <u>https://doi.org/10.1016/j.aaf.2019.07.002.</u>
- 7.1.14 Dearlyn Fernandes, Ying Wu, Prabhaker Vasant Shirodkar, Umesh Kumar Pradhan, Jing Zhang and <u>Samwel Mchele Limbu (2020)</u>. Sources and preservation dynamics of organic matter in surface sediments of Narmada River, India illustrated by amino acids. *Journal of Marine Systems*, 201: 103239. https://doi.org/10.1016/j.jmarsys.2019.103239
- 7.1.15 Fang Tan, <u>Samwel Mchele Limbu</u>, Ye Qian, Fang Qiao, Zhen-Yu Du and Meiling Zhang (2019). The responses of germ-free zebrafish (*Danio rerio*) to varying bacterial concentrations, colonization time points and exposure duration. *Frontiers in Microbiology* 10; Article 2156; 1 13. https://doi.org/10.3389/fmicb.2019.02156
- 7.1.16 Jing Wang, Si-Lan Han, Dong-Liang Lu, Ling-Yu Li, <u>Samwel Mchele Limbu</u>, Dongliang Li, Meiling Zhang and Zhen-Yu Du (2019). Inhibition of lipophagy suppresses lipid metabolism in zebrafish liver cells, *Frontiers in Physiology*, 10; Article 1077; 1-9. <u>https://doi.org/10.3389/fphys.2019.01077</u>
- 7.1.17 Li, J.-M., Li, L.-Y., Zhang, Y.-X., Jiang, Z.-Y., <u>Limbu, S.M.</u>, Qiao, F., Degrace, P., Chen, L.-Q., Zhang, M.-L. and Du Z.-Y. (2019). Functional differences between 1- and d-carnitine in metabolic regulation evaluated using a low-carnitine Nile tilapia

model. *British Journal of Nutrition*, **122**(6): 625-638. https://doi.org/10.1017/S000711451900148X

- 7.1.18 Weiguang Zou, Zhideng Lin, Yisheng Huang, <u>Samwel Mchele Limbu</u>, Hua Rong, Chuanqi Yu and Xiaobo Wen (2019). Dietary vitamin C requirements and its effects on growth performance, hepatotoxicity, antioxidant capacity and innate immunity in juvenile Chu's croaker (*Nibea coibor*). Aquaculture Nutrition, 26(1): 60-73. <u>https://doi.org/10.1111/anu.12967</u>
- 7.1.19 Sheng-Xiang Sun, Yun-Ni Zhang, Dong-Liang Lu, Wei-Li Wang, Samwel Mchele Limbu, Dong-Liang Li, Li-Qiao Chen, Mei-Ling Zhang and Zhen-Yu Du (2019). Concentration-dependent effects of 17 β-estradiol and bisphenol A on lipid metabolism, inflammation and antioxidant response in male zebrafish (*Danio rerio*). *Chemosphere*, 237: (2019) 124422. https://doi.org/10.1016/j.chemosphere.2019.124422
- 7.1.20 Dearlyn Fernandes, Ying Wua, P. V. Shirodkar, Umesh Kumar Pradhan, Zhuo-Yi Zhu, Jing Zhang and <u>Samwel Mchele Limbu</u> (2019). Spatial and temporal variations of organic matter in sediments of the Netravati River, India. *Hydrological Processes*, 33(20): 2642-2657. <u>https://doi.org/10.1002/hyp.13516</u>
- 7.1.21 Jian-Ting Lu, Changle Qi, <u>Samwel Mchele Limbu</u>, Fenglu Han, Jian Qin, Liqiao Chen, Lu Yang and Xiaodan Wang (2019). Dietary mannan oligosaccharide (MOS) improves growth performance, antioxidant capacity, non-specific immunity and intestinal histology of juvenile Chinese mitten crabs (*Eriocheir sinensis*). Aquaculture, 510: 337–346. https://doi.org/10.1016/j.aquaculture.2019.05.048
- 7.1.22 <u>Samwel M. Limbu</u>, Qiang Ma, Mei-Ling Zhang and Zhen-Yu Du (2019). High fat diet worsens the adverse effects of antibiotic on intestinal health in juvenile Nile tilapia (*Oreochromis niloticus*). Science of the Total Environment, 680: 169-180. https://doi.org/10.1016/j.scitotenv.2019.05.067
- 7.1.23 Amon P. Shoko, <u>Samwel M. Limbu</u>, Hieromin A. Lamtane, Mary A. Kishe-Machumu, Baraka Sekadende, Eusebia E. Ulotu, Joram C. Masanja and Yunus D. Mgaya (2019). The role of fish-poultry integration on fish growth performance, yields and economic benefits among smallholder farmers. *African Journal of Aquatic Science*, 44(1): 15-24. <u>https://doi.org/10.2989/16085914.2018.1555512</u>
- 7.1.24 Zhideng Lin, Weiguang Zou, Yisheng Huang, <u>Samwel Mchele Limbu</u>, Fenglu Han and Xiaobo Wen (2019). Molecular cloning and functional characterization of elongase (elovl5) and fatty acyl desaturase (fads2) in sciaenid, *Nibea diacanthus* (Lacepède, 1802), *Gene*, 695: 1-11. <u>https://doi.org/10.1016/j.gene.2019.01.033</u>
- 7.1.25 Fangning Xu, Chang Xu, Shusheng Xiao, Maixin Lu, <u>Samwel M. Limbu</u>, Xiaodan Wang, Zhenyu Du, Jian G. Qin and Liqiao Chen (2019). Effects of α lipoic acid on growth performance, body composition, antioxidant profile and lipid metabolism of the GIFT tilapia (*Oreochromis niloticus*) fed high-fat diets. *Aquaculture Nutrition*, 25(3): 585-596. <u>https://doi.org/10.1111/anu.12881</u>
- 7.1.26 Dong-Liang Lu, Qiang Ma, Li-Jun Ning, Jing Wang, Ling-Yu Li, Jia-Min Li, Si-Lan Han, Sheng-Xiang Sun, <u>Samwel Mchele Limbu</u>, Dong-Liang Li, Fang Qiao, Li-Qiao Chen, Mei-Ling Zhang and Zhen-Yu Du (2019). Fasting enhances cold resistance in fish through stimulation of lipid catabolism and autophagy, *The Journal of Physiology*, 597(6):1585–1603. <u>https://doi.org/10.1113/JP277091</u>

- 7.1.27 Han Zhang, Jia-Jing Wen, Yun-Ni Zhang, <u>Samwel McheleLimbu</u>, Zhen-Yu Du, Jian-Guang Qin and Li-Qiao Chen (2019). Forskolin reduces fat accumulation in Nile tilapia (*Oreochromis niloticus*) through stimulating lipolysis and beta-oxidation, *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*, 230: 7-15. <u>https://doi.org/10.1016/j.cbpa.2018.12.011</u>.
- 7.1.28 Dong-Liang Lu, <u>Samwel Mchele Limbu</u>, Hong-Bo Lv, Qiang Ma, Li-Qiao Chen, Mei-Ling Zhang and Zhen-Yu Du (2019). The comparisons in protective mechanisms and efficiencies among dietary α-lipoic acid, β-glucan and L-carnitine on Nile tilapia infected by *Aeromonas hydrophila*. Fish & Shellfish Immunology, 86: 785-793. <u>https://doi.org/10.1016/j.fsi.2018.12.023</u>
- 7.1.29 Imani Benedict Kapinga, <u>Samwel Mchele Limbu</u>, Nazael Amos Madalla, Wahabu Hamisi Kimaro, Faith Philemon Mabiki, Hieromin Amon Lamtane and Rashid Adam Tamatamah (2018). Dietary *Aspilia mossambicensis* and *Azadirachta indica* supplementation alters reproductive performance and induces gonadal histopathological effects in Nile tilapia (*Oreochromis niloticus*), *Aquaculture Research*, 50(2): 573-580. <u>https://doi.org/10.1111/are.13931</u>
- 7.1.30 Liu, Y., Jiao, J-G., Gao, S., Ning, L-J., <u>Samwel M. Limbu</u>, Qiao, F., Chen, L-Q., Zhang, M-L. and Du, Z-Y. (2018). Dietary oils modify lipid molecules and nutritional value of fillet in Nile tilapia: a deep lipidomics analysis, *Food Chemistry*, 277: 515-523. <u>https://doi.org/10.1016/j.foodchem.2018.11.020</u>.
- 7.1.31 Salome Shayo and <u>Samwel M. Limbu</u> (2018) Nutrient release from the sediments and biological nitrogen fixation; advancing sources of eutrophication in Lake Victoria, Tanzania. *Lakes & Reservoirs: Research and Management*, 23(4): 312-323. <u>https://doi.org/10.1111/lre.12242</u>
- 7.1.32 Ling-Yu Li, <u>Samwel Mchele Limbu</u>, Qiang Ma, Li Qiao Chen, Mei Ling Zhang_and Zhen-Yu Du (2018). The metabolic regulation of dietary L-carnitine in aquaculture nutrition: present status and future research strategies. *Reviews in Aquaculture*, 11(4): 1228-1257. <u>https://doi.org/10.1111/raq.12289</u>
- 7.1.33 Jing Wang, Si-Lan Han, Ling-Yu Li, Dong-Liang Lu, <u>Samwel Mchele Limbu</u>, Dong-Liang Li and Mei-Ling Zhang (2018). Lipophagy is essential for lipid metabolism in fish. *Science Bulletin*, 16(14): 879-882. <u>https://doi.org/10.1016/j.scib.2018.05.026</u>
- 7.1.34 Yi Sheng, Hui Ren, <u>Samwel M. Limbu</u>, Yuhong Sun, Fang Qiao, Wanying Zhai, Zhen-Yu Du and Meiling Zhang (2018). The presence or absence of intestinal microbiota affects lipid deposition and related genes expression in zebrafish (*Danio rerio*). *Frontiers in Microbiology*, 9: 1-9. <u>https://doi.org/10.3389/fmicb.2018.01124</u>
- 7.1.35 Sheng-Xiang Sun, Xue-Ming Hua, Yun-Yun Deng, Yun-Ni Zhang, Jia-Min Li, Zhao Wu, Samwel Mchele Limbu, Da-Sheng Lu, Hao-Wen Yin, Guo-Quan Wang, Rune Waagbø, Frøyland Livar, Mei-Ling Zhang and Zhen-Yu Du (2018). Tracking pollutants in dietary fish oil: from ocean to table. *Environment Pollution*, 240; 733–744. https://doi.org/10.1016/j.envpol.2018.05.027
- 7.1.36 Jia-Min Li, Ling-Yu Li, Xuan Qin, Pascal Degrace, Laurent Demizieux Demizieux, <u>Samwel Mchele Limbu</u>, Xin Wang, Mei-Ling Zhang, Dong-Liang Li and Zhen-Yu Du (2018). Inhibited carnitine synthesis causes systemic alteration of nutrient metabolism in zebrafish. *Frontiers in Physiology*, 9: 1-12. <u>https://doi.org/10.3389/fphys.2018.00509</u>

- 7.1.37 Cai-Zhi Liu, Yuan Luo, <u>Samwel Mchele Limbu</u>, Li-Qiao Chen and Zhen-Yu Du (2018). IGF-1 induces SOCS-2 but not SOCS-1 and SOCS-3 transcription in juvenile Nile tilapia (*Oreochromis niloticus*). *Journal of Experimental Biology*: jeb.179291. http://jeb.biologists.org/content/early/2018/04/11/jeb.179291
- 7.1.38 Li Zhou, <u>Samwel Mchele Limbu</u>, Fang Qiao, Zhen-Yu Du, Meiling Zhang (2018). Influence of long-term feeding antibiotics on the gut health of zebrafish, *Zebrafish*, 15(4): 340-348. <u>https://doi.org/10.1089/zeb.2017.1526</u>
- 7.1.39 <u>Samwel M. Limbu</u>, Li Zhou, Sheng-Xiang Sun, Mei-Ling Zhang and Zhen-Yu Du (2018). Chronic exposure to low environmental concentrations and legal aquaculture doses of antibiotics cause systemic adverse effects in Nile tilapia (*Oreochromis niloticus*) and provoke differential human health risk. *Environment International*, 115: 205 219. <u>https://doi.org/10.1016/j.envint.2018.03.034</u>
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7.2 Books and Chapters in Books

7.2.1 Books

None

7.2.2 Chapters in Books

- 7.2.2.1 Limbu S.M. (2020) Antibiotics Use in African Aquaculture: Their Potential Risks on Fish and Human Health. *In*: Abia A. and Lanza G. (Eds) Current Microbiological Research in Africa. Springer, Cham, pp. 203-221. <u>https://doi.org/10.1007/978-3-030-35296-7_8</u>.
- **7.2.2.2 Katunzi E.F.B., Mgaya Y.D., Mkumbo O.C. and <u>Limbu S.M.</u> (2017). Fish Biology and Life History Indicators.** *In***: Mgaya, Y.D. and Mahongo, S.B. (Editors),** *Lake Victoria Fisheries Resources: Research and Management in Tanzania***. Springer, Switzerland, pp. 61-79. <u>http://dx.doi.org/10.1007/978-3-319-69656-0_4</u>**
- 7.2.2.3 Mgaya Y.D., <u>S.M. Limbu</u>, Lugomela C.V., Kayanda R. J. and Ngupula G.W. (2017). Biodiversity Indicators: Plankton and Macroinvertebrates in Lake Victoria, Selected Satellite Lakes and Rivers. *In*: Mgaya, Y.D. and Mahongo, S.B. (Editors), *Lake Victoria Fisheries Resources: Research and Management in Tanzania*. Springer, Switzerland, pp. 81-106. <u>http://dx.doi.org/10.1007/978-3-319-69656-0_5</u>
- 7.2.2.4 Shoko A.P., Mgaya Y.D., <u>Limbu S.M.</u> and Hoza R. (2017). Aquaculture and Fisheries Extension. In: Mgaya, Y.D. and Mahongo, S.B. (Editors), Lake Victoria Fisheries Resources: Research and Management in Tanzania. Springer, Switzerland, pp. 137-160. <u>http://dx.doi.org/10.1007/978-3-319-69656-0_7</u>

8 SELECETD SHORT COURSES, CONFERENCES AND WORKSHOPS ATTENDED

From 14th to 18th October 2019 I attended The Twelfth Symposium of **World's Chinese** Scientists on Nutrition and Feeding Finfish and Shellfish in Zhengzhou, China.

From 8th to 14th, September 2019 I attended and presented a paper during the inauguration meeting of the AfriMAQUA Research Network for Sustainable Marine Aquaculture in Africa in Stellenbosch, South Africa.

From 4th September to 29th October 2018 studied an online course on **Research Writing in the Sciences** (INASP-AuthorAID).

From 24th to 25th April 2018, I attended **The Second International Symposium on Marine Microplastic Pollution and Control** held in Shanghai, China.

From 30th October to 4th November 2017, I attended **Tenth Western Indian Ocean Marine Science Association (WIOMSA) Scientific Symposium** held in Dar es Salaam, Tanzania.

From 27th to 29th October 2017, I attended a short in **R programming organised** by Western Indian Ocean Marine Science Association (WIOMSA) held in Dar es Salaam, Tanzania.

From 18 April to 12 June 2017 studied an online course on **Proposal Writing & Research Writing** (INASP-AuthorAID).

From 16 to 17/10/2015 I attended a conference on **Shanghai City Aquatic Animal Nutrition Graduate Forum** hosted by the Laboratory of Aquatic Animal Nutrition and Environmental Health (LANEH) of the School of Life Science, Department of Biology.

On 28/10/2015 I attended a seminar on **Current status and Future Perspectives of Shrimp Economics and Crab Nutrition in China** at East China Normal University organized by East China Normal University.

On 28/09/2015 I attended a seminar on **Aquaculture Development and Research Progress** at East China Normal University organized by East China Normal University and Flinders University, Adelaide Australia.

From $6^{th} - 8^{th}$ February 2014 I attended a stakeholders' workshop for M.Sc. curriculum development in **The Health of Aquatic Animals** under the **TRAHESA NORHED** Project for Sokoine University of Agriculture in Morogoro.

From 25th February to 1st March 2013, I was involved in short course titled "**Applied Statistics and Ecological Modelling in R**" organised and conducted by The Institute of Resources Assessment of the University of Dar es Salaam in Collaboration with Aarhus University of Denmark.

On 6th July 2012, I was involved in training fish farmers a course titled fish farming in the project **Integrating Agriculture and Aquaculture for Increased Farm Productivity** under a government funding through Tanzania Commission for Science and Technology (COSTECH).

From 14th to 25th November 2011, I was involved in training trainees on a course titled "**Wetland Ecology and Management**" organised and conducted by The Department of Aquatic Sciences and Fisheries of the College of Natural and Applied Science at the University of Dar es Salaam.

From 4th to 8th April 2011, I was involved in training Fisheries Officers on a course titled "**Fisheries Management and Fish Farming**" organised and conducted by The Department of Aquatic Sciences and Fisheries of the College of Natural and Applied Science at the University of Dar es Salaam.

From 6th to 10th September 2010, I attended a workshop titled **Geo-referencing Training of Trainers Workshop** at The Tanzania Commission for Science and Technology in Dar es Salaam

From 9th to 20th August 2010, I attended a course titled **Molecular Systematic and Conservation** at the University of Dar es Salaam

From 2nd to 17th December 2007, I attended a course titled **Scientific Methodologies in Marine Biology** *a practical approach using tropical intertidal habitats* conducted in Pemba, Mozambique.

From 1st to 4th June 2007, I participated in the **First Tanzania Marine Forum** held in Dar es Salaam.

9. LANGUAGES

Reading and basic speaking competence in English, Swahili and Chinese.

10. SKILLS

Proven skills in scientific writing and data analysis using Statistical Package for the Social Sciences (SPSS), GraphPad Prism and Origin. Appreciable ability using Microsoft Office Excel, word and power point.

CERTIFICATION: I, the undersigned certify that, to the best of my knowledge and belief, this Curriculum Vitae correctly describes qualifications, my experience and myself.

REFEREES

 Prof. William A. L. Anangisye (PhD) Vice Chancellor, University of Dar es Salaam (UDSM) 3rd Floor, Cranford Platt Building P.O. Box 35091 Dar es Salaam TANZANIA Email: <u>wala261219@gmail.com</u> <u>wanangisye@udsm.ac.tz</u> Tel: +255 763 119 253 (Mobile) +255 22 2410700 (Office)

- 2. Prof. Yunus D. Mgaya (PhD) Director General National Institute for Medical Research (NIMR) 3 Barack Obama Drive P.O. Box 9653, 11101 Dar es Salaam TANZANIA E-mail: <u>yunusmgaya@gmail.com</u> Website: <u>www.nimr.or.tz</u> Tel.: +255 784 237 774 (Mobile) +255 222121400 (Office) Skype: yunusmgaya1
- 3. Dr. Rashid Tamatamah (PhD) Permanent Secretary Ministry of Livestock and Fisheries Government City Mtumba, Ulinzi Street, P. O. Box, 2847, 40487 Dodoma, TANZANIA Email: libramundial@yahoo.co.uk Tel.: +255 784 804 538

Signature

Date: 12/02/2021