

## *Curriculum Vitae*



### 1. PERSONAL DATA

**Name:** Najma Dharani; **Citizenship:** Kenyan

#### **Educational Background**

PhD in Botany (Plant/Environmental Ecology) from the University of Nairobi.  
M.Sc in Botany (Plant Morphogenesis) from the University of Karachi  
B.Sc (Hons.) in Botany from the University of Karachi

#### **Contact Address:**

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**Website:** [www.najmadharani.com](http://www.najmadharani.com)

**Position:** Senior Lecturer

## WORK EXPERIENCE

- Oct 2017 to-date      **“Senior Lecturer”** Kenyatta University, Department of Plant Sciences.  
(Teaching Advanced plant Ecology; Biodiversity Conservation & principles; Conservation and protected areas (Undergraduate); Marine Vegetation (MSc unit); Special Topics in Ecology (MSc. unit); Medicinal Plants (MSc. Unit)
- Jan 16<sup>th</sup> 2015 to 31<sup>st</sup> Aug’ 2017      **“Senior Lecturer”** at Pwani University, Department of Environmental Sciences.  
(Research, Teaching and Field study) - courses including: Advanced Environmental Ecology (MSC Unit), Principles of Environmental Ecology (Undergraduate Unit), East African Flora and Fauna, Principles of Ethnobotany (BSc Units); Biodiversity Conservation & Natural Resource Management; Climate change and Global Warming (MSc Units).
- 15<sup>th</sup> Feb’08 to 16<sup>th</sup> Jan’2015      **“Lecturer”** at the School of Environmental Sciences, Kenyatta University, Nairobi. (Research, Teaching and Field study) - courses including: Advanced Environmental Ecology, Principles of Environmental Ecology, East African Flora and Fauna, Endangered Species, Agroforestry practices and farming systems in different agro-ecosystems in East Africa, Principles of Ethnobotany, Environmental Biology includes Morphogenesis/Plant Genetics and Hereditary (BSc units); Ecology of agronomic crops, Land Use Dynamics and Conservation, Biodiversity Conservation (MSc units).
- March’07 to 15<sup>th</sup> Jan’08      **“Lecturer”** at the Department of Biological Sciences, University of Dar es Salaam, Tanzania  
(Research and Teaching Plant Ecology/Plant Taxonomy and Plant Genetics)
- Nov’04 to Feb ’07      **“Part-time Lecturer”** at the Department of Land Use Resource Management and Agriculture Technology (LARMAT), University of Nairobi. Duties included teaching and field study of Dry land Agroforestry systems and techniques in Kenya; Rangeland plants and their sustainable uses; Plant Genetics and Plant Taxonomy.

## AREAS OF SPECIALIZATION:

- 1. Plant / Environmental Ecology** (East African Ecosystems & their biodiversity; Industrial Pollution Ecology - impact of pollution on the biodiversity of Terrestrial and aquatic Lake Ecosystems in the Rift valley and marine ecosystems)
- 2. Biodiversity Conservation and Management** (Distribution, ecology, morphology, economic and socio-economic and ecological significance and conservation status of Flora and fauna of East Africa)
- 3. Ethnobotany and Ethno veterinary medicine** (Research in Medicinal Plants to prevent, treat and cure diseases in Human, Livestock and Poultry)

## **ADMINISTRATIVE DUTIES:**

### **Current Departmental Administrative Duties:**

- 1) Board of Postgraduate Studies (BPS committee- Member)
- 2) Examination Moderation Committee (Member)

### **Past Administrative Duties at Pwani University:**

- 1) Post graduate coordinator for School of Environmental & Earth Sciences (SEES);
- 2) Departmental Post graduate coordinator, Department of Environmental Sciences, Pwani University

### **Past Administrative Duties at Kenyatta University:**

- 1) Environmental Coordinator (ISO-9001-2000) for the Department of Environmental Sciences (ENS) for 4 years;
- 2) Field trip Coordinator for the Dept. of ENS;
- 3) Curriculum Development Committee for 2 years.

## **2. PUBLICATIONS**

### **a) Published Papers**

<b>Author</b>	<b>Yr.</b>	<b>Title</b>	<b>Journal</b>	<b>ISBN/ISSN Reference No.</b>
Wanyera Francis, Kinyamario J., Najma Dharani and Robert M.	2018	Ecotourism and local community activities on ecosystem changes in and around Volcanoes National Park, Rwanda	International journal of Plant, Animal and Environmental Sciences (IJPAJX)	IJPAJX Vol. 8, No. 3 ISSN-2231-4490 (DOI: 10.21276/Ijpaes
Wanyera Francis, Kinyamario J., Najma Dharani and Robert M.	2018	Population dynamics and land-use changes around protected areas. A case of Bwindi Impenetrable National Park, Uganda.	International journal of Plant, Animal and Environmental Sciences (IJPAJX)	IJPAJX Vol. 8, No. 3 ISSN-2231-4490 (DOI: 10.21276/Ijpaes
Carol J Rotich and Najma Dharani	2018	Species Distribution, Diversity and Conservation of Indigenous Medicinal Plants in Selected Areas of Baringo County, Kenya	Journal of Chemical, Biological and Physical Sciences	J. Chem. Bio. Phy. Sci. Vol. 8, No. 3; 000-000. [DOI:10.24214/jc bps.B.8.3.00000.]

Najma Dharani	2016	Traditional Ethnomedicinal uses and phytochemical compounds of <i>Carissa spinarum</i> L. in East Africa: a review.	Pharm Journal - Published by Kenyatta University Pharmacy Students Association (KUPHSA). Kenyatta University Press (KUP)	PHARM J. July –Dec 2016, Vol. 02
Najma Dharani	2016	Traditional Ethnomedicinal uses, phytochemistry and pharmacological properties of <i>Balanites aegyptiaca</i> (L.) Del. in East Africa: a review.	Pharm Journal - Published by Kenyatta University Pharmacy Students Association (KUPHSA). Kenyatta University Press (KUP)	PHARM J. July –Dec 2016, Vol. 02
Najma Dharani	2016	A Review of Traditional Uses and Phytochemical Constituents of Indigenous <i>Syzygium</i> Species in East Africa	Pharmaceutical Journal of Kenya	Pharma. J. Kenya. Vol. 22, No 4. ISSN 2411-6386
Najma Dharani	2016	A Review of Traditional Medicinal Uses and Phytochemical Constituents of Exotic <i>Syzygium</i> Species in East Africa	Pharmaceutical Journal of Kenya	Pharma. J. Kenya. Vol. 22, No 4. ISSN 2411-6386
Demissew Tsigemelak, Najma Dharani	2016	Assessment of the Ecological Distribution, Species Diversity and abundance of Medicinal Plants in Central Kajiado, Kajiado County, Kenya	International Journal of Plant, Animal and Environ Sciences	IJPAES Volume-6, Issue-3 ISSN-2231-4490
Christopher M.Ndolo, Najma Dharani, Katja K.	2016	Socioeconomic and Biophysical factors affecting tree richness and diversity in Machakos County, Eastern Kenya	International Journal of Plant, Animal and Environ Sciences	IJPAES Volume-6, Issue-3 ISSN-2231-4490
Demissew Tsigemelak, Najma Dharani, Jenesio I Kinyamario, Samuel Kiboi	2016	The Utilization of Medicinal Plants by the Masaai community in arid lands of Kajiado County, Kenya	International Journal of Plant, Animal and Environ Sciences	IJPAES Volume-6, Issue-3 ISSN-2231-4490
Ermais, Dharani, Mathews	2012	The indigenous knowledge of the Maasai Ethnoveterinary diagnostic skills	Journal of Human Ecology	J. Hum. Ecol., 16(1): 43-48 (2012)
Najma Dharani <i>et al.</i> ,	2010	Distribution of Zn and Cd levels in Soils and <i>Acacia xanthophloea</i> Benth, from Lake Nakuru National Park, Kenya.	Bulletin of Environmental Contamination Toxicology Springer New York, USA.	Vol, 3: 318 – 323
Najma Dharani <i>et al.</i> ,	2008	Browsing impact of large herbivores on <i>Acacia xanthophloea</i> Benth in Lake Nakuru National Park, Kenya.	African Journal of Ecology-Blackwell Publishing Ltd-UK.	Vol, 47: 184 – 191.
Najma Dharani <i>et al.</i> ,	2007	The Distribution of Cu and Pb levels in Soils and <i>Acacia xanthophloea</i> Benth, from Lake Nakuru National	Bulletin Environmental Contamination Toxicology Springer	Vol, 79: 172 – 177

		Park, Kenya.	New York, USA.	
Najma Dharani <i>et al.</i> ,	2006	Structure and Composition of Acacia xanthophloea woodland in Lake Nakuru National Park, Kenya.	African Journal of Ecology-Blackwell Publishing Ltd-UK.	Vol, 44: 523 – 530
Najma Dharani,	2006	The Debarking in Lake Nakuru National Park, Kenya. CONSERVATION. (Article was published from my PHD WORK)	SWARA - East African Wildlife Society-Kenya	Vol, 29: 42 - 45

### b) (Published Books)

Dharani, N.	Feb. 2019	Field Guide to common Trees and Shrubs of East Africa (Fully Revised 3 <sup>rd</sup> Edition)	Published by Struik Random House Publishers, Cape Town, South Africa	ISBN: 978 1 77007 888 8
Dharani, N., <i>et al</i>	Dec. 2015	Ethno veterinary Medicine in East Africa	Published by World Agro forestry Centre, Nairobi-Kenya	ISBN: 978-92-9059-335-5
Dharani, N.	Nov 2011	Field Guide to common Trees and Shrubs of East Africa (2 <sup>nd</sup> Edition)	Published by Struik Random House Publishers, Cape Town, South Africa	ISBN: 978 1 77007 888 8
Dharani, N., <i>et al</i>	Jan 2011	Common Antimalarial Trees and Shrubs of East Africa –A description of species and a guide to cultivation and conservation through use	Published by World Agro forestry Centre, Nairobi-Kenya	ISBN: 978 92 9059 238 9.
Dharani, N. and Yenesew, A.	March 2010	Medicinal Plants of East Africa- <i>An Illustrated Guide.</i>	Published by Najma Dharani in association with Drongo publishing, Nairobi-Kenya	ISBN: 978-9966-05-167-8.
Dharani, N.	2002	Field Guide to common Trees and Shrubs of East Africa (1st Edition)	Published by Struik Random House Publishers, Cape Town, South Africa	ISBN: 1-86872 640 2.
Dharani, N.	2006	Field Guide to Acacias of East Africa. (1st Edition)	Published by Struik Random House Publishers, Cape Town, South Africa	ISBN: 9781770071742

### 3. CURRENT SUPERVISION OF POSTGRADUATE STUDENTS

Name of student	Thesis title	Status of project (e.g. First year etc)
Marystella N. Wekhanya (I84/CE/38117/2017) <b>PhD.</b> Student at Kenyatta University, Dept. of Plant Sci.)	Reproduction Biology and Indigenous Knowledge Of <i>Prosopis juliflora</i> at Baringo County, Kenya.	PhD Proposal development stage
Ogola Kevin Omollo (I56/37485/2017) <b>MSc.</b> Student at Kenyatta University, Dept. of Plant Sci.)	Assessment of sequestration potential and biomass accumulation in managed mangrove plantations of Mida Creek, Kilifi County Kenya	Student successfully defended his proposal in December 2018.
David A. Erasto (MG20/PU/36088/16) <b>MSc.</b> Student at Pwani University, Dept. of Env. Sci.)	Assessment of Structure and Natural regeneration of <i>Avicenia marina</i> and <i>Bruguiera gymnorrhiza</i> species of mangroves in Mida Creek, Kilifi County, Kenya	Student successfully defended his proposal in November 2018.
Godfrey Wabwile Wafula (N50/PUC/2040/12) <b>MSc.</b> Student at Pwani University, Dept. of Env. Sci.)	Assessment Of The Influence Of Industrial Effluent On The Performance Of Mavoko Sewer Treatment Ponds, Machakos County, Kenya	Student successfully defended his proposal in March 2019.
Hussein Aden (N50/PU/6065/15) <b>(MSc.</b> Student at Pwani University, Dept. of Env. Sci.)	Investigation of the impact of butterfly farming & harvesting on wild butterfly population in the nature reserve of Arabuko Sokoke Forest.	Final thesis have been submitted to Internal and External Examiners
Wanyera John Francis, <b>(PhD.</b> Student, Dept of Botany-University of Nairobi)	Climate variability and anthropogenic impacts on ecosystems and eco-tourism in protected areas: a case of Bwindi impenetrable national park, Uganda	Final thesis have been submitted to Internal and External Examiners

**4. SUPERVISION OF POSTGRADUATE (MSc.) AND PHD STUDENTS WHO HAVE COMPLETED AND GRADUATED**

<b>Name of student</b>	<b>Thesis title</b>	<b>MSc. Students graduated</b>
Mutungu Christopher Ndolo ( N50/21206/2010) (MSc. Student at KU- Dept. of Environmental Science)	Socio-economic and biophysical factors affecting tree diversity on farms in Mwala, Kangundo and Machakos divisions, Machakos county, Kenya.	Student successfully defended his thesis in Oct, 2016. (Student graduated in August 2017).
Kathiai Joseph Karauka (N50/ 85/1360/2009) (PhD. Student at KU- Dept. of Environmental Science )	Integrated of Trees with Food Crops in Different Agro-ecological Systems: A comparative Analysis of Soil fertility in Kenya	Student graduated in Dec. 2016
Carol Jeruto Rotich (N50/CTY/PT/23013/11) (MSc. Student at KU- Dept. of Environmental Science )	Distribution, diversity and integration of traditional knowledge on indigenous medicinal plants and their contribution to primary healthcare and livelihoods of rural communities in Marigat district, Kenya	MSc. Project (KU) (Project finished) (Student graduated in Dec. 2015)
Demissew T. Gebreyohannes (N50/12313/2009) (MSc. Student at UoN- Dept. of Botany)	Distribution, Diversity and Integration of Traditional Knowledge on Indigenous Medicinal Plants and their contribution to primary healthcare and livelihoods of rural communities in Central Kajiado, Kenya	MSc. Project – (University of Nairobi). (student graduated in August 2013)
Raphael Wanjala Wanyonyi (N50/15/427/2008) (MSc. Student at KU- Dept. of Environmental Science )	Impact of Human Population on Land Degradation in Lugari District, Western Province, Kenya	MSc. Project (KU) (Project finished) (Student graduated in December 2012)
Pamella Wambui Kunyuga(N50/12342/2009)  (MSc. Student at KU- Dept. of Environmental Science )	Assesment of Genetic Diversity of Sorghum bicolor landraces from Tanzania using SSR markers: Implications for conservation	MSc. Project – KU-(ECD student). (Student graduated in December 2012)

## 5. ASSIGNED AS AN INTERNAL EXAMINER

Name of student	Thesis title	Year
Chebet Gladys (MSc thesis- Kenyatta University)	Abundance, Survival and Conservation Status of <i>Prunus africana</i> (Hook.f) Kalkm. in Western Mau forest, Kenya	February, 2019
Edwin Nyamba Mwashinga (MSc thesis- Pwani University)	Effects of land –based activities and sources on fresh Water reseources: A case study of selected heavy metal contamination in river Mkurumudzi, Kwale County.	September 2016
Agnes Samba Kiunga (MSc thesis- Pwani University)	Phytoremediation of Kipevu waste water using vetiver grass.	July 2016
Sheila Mumbi Asweli Wamugi (MSc thesis- Pwani University)	Evaluation of Effects of Climate Change and Adaption Strategies in Small Holder Farming Systems	July 2016
Abdulmajeed Omar Said (MSc thesis- Pwani University)	Assessment of the structure and biomass accumulation in mangrove forest of Kilifi Creek, Kenya.	March 2016
Esther W. Mugi (MSc thesis-Kenyatta University)	Integrating indigenous and conventional knowledge-based climate forecasts for farmers enhanced adaption to climate variability in Tharaka-Nithi and Kitui counties.	January 20 <sup>th</sup> 2014
Mr Ngumi David Muigai (MSc. thesis- Kenyatta University)	Germination and growth performance of selected provenances of <i>Osyris lanceolata</i> in Kenya.	November 2011
Mr Samuel Jacob Muthuri Kirera (MSc thesis- Kenyatta University)	Analysis of some physical soil properties on water availability in Ngaciuma-Kinyaritha sub-catchment, Upper Tana Basin, Kenya.	November 2011
Ms Regina Nthambi Maingi (MSc thesis- Kenyatta University)	Opportunities and Challenges of scaling up <i>Jatropha curcas</i> L. for environmental management and enhanced livelihoods in Kibwezi, Kenya.	Student’s defence- University Examination Senate October 2010



## 6. ASSIGNED AS AN EXTERNAL EXAMINER

Name of student	Thesis title	Year
Ms Maryanne M. Gitari (School of Biological Sciences, <b>University of Nairobi</b> ) <b>(MSc. Thesis)</b>	Assesment of Leopard ( <i>Panthera pardus</i> ) and Spotted Hyena ( <i>Crocuta crocuta</i> ) diet and prey base along burguret trail in Mt. Kenya forest, Kenya.	July 2019
Charles N. Nyamwamu (School of Biological Sciences, Dept. of Botany, <b>JKUAT</b> ) <b>(MSc. Thesis)</b>	Abundance and Diversity of Weed species in Farms in Kisii Central sub County, Western Kenya	March 2019
William K. Ruto (College of Biological and Physical Sciences, <b>University of Nairobi</b> ) <b>(PhD Thesis)</b>	Influence of Human Population and Land–Use changes on environmental quality of a Riparian Ecosystem: A case study of Saiwa Swamp, Trans Nzoia County, Kenya.	October 2018
Bernard Ochieng (Department of Environmental Sciences, <b>Pwani University</b> ) <b>(MSc. Thesis)</b>	Evaluating the population status and foraging ecology of sable antelope ( <i>Hippotragus Niger roosevolti – Heller</i> ) in Shimba Hill National Reserve, Kenya.	July 2018
Mr. Felix S. Abdalla (School of Biological Sciences, <b>University of Nairobi</b> ) <b>(MSc. Thesis)</b>	Comparative autecology of tree species using leaf and wood traits within nine forest of the Taita Hills	June 2014
Mr. Simon F. Nguru Wandeto (School of Biological Sciences, <b>University of Nairobi</b> ) <b>(MSc. Thesis)</b>	Developing strategies for restoration of a disturbed site in Kakamega forest using Arbuscular Mycorrhiza Fungi (AMF)	December 2013