

## *Curriculum Vitae*



### 1. PERSONAL DATA

**Name:** Najma Dharani

#### **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  
(Undergraduate); Marine Vegetation (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)
4. **Evergreen Agriculture/Climate Smart Agriculturer/Conservation farming with trees** (Agroforestry practices and farming systems in different agro-ecological zones in Eastern and Southern Africa)

## **ADMINISTRATIVE DUTIES:**

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

- 1) Research and Linkages Committee (Chairperson)
- 2) Board of Postgraduate Studies (BPS committee- Member)
- 3) Examination Moderation Committee (Member)
- 4) Library, Archive & Herbarium committee (Assistant Chairperson)
- 5) Botanical Gardens 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
- 3) Coordinator – Environmental Science (Curriculum improvement, choices of elective units and allocation)

### **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. CONFERENCE /SEMINARS/WORKSHOPS ATTENDED**

<b>Date of Conference</b>	<b>Conference /Seminars/Workshops attended</b>	<b>City/ Country</b>
17 <sup>th</sup> to 19 <sup>th</sup> April 2018	2 <sup>nd</sup> National Conservation Agriculture Conference, Kenya	FAO Conference at Safari Park Hotel, Nairobi
24 <sup>TH</sup> to 25 <sup>th</sup> March 2017	Kenya coastal Development Project (KCDP)-Building Coastal Capacity for Sustainable Natural Resource Use and Management Conference	Turtle Bay Watamu
17 <sup>TH</sup> to 19 <sup>TH</sup> March 2017	Conference on Tourism and Hospitality in Mwingi organized by Kitui County Government	Mwingi-Kitui County
5 <sup>th</sup> – 9 <sup>th</sup> September 2016	Science Week – Theme-Agroforestry for Health , Nutrition & Food Security	ICRAF- Headquarters Nairobi-Kenya
10 <sup>th</sup> - 11 <sup>th</sup> May, 2016	1 <sup>ST</sup> National Conservation Agriculture Conference, Kenya	FAO Conference at Safari Park Hotel, Nairobi
31 – 1 <sup>st</sup> April 2015	workshop on the Adoption of Agroforestry and Contribution to the Sustainable Development Outcomes in Kenya	ICRAF- Headquarters Nairobi-Kenya
8 – 12 Sept. 2014	Science Week – Theme-Agroforestry for Sustainable	ICRAF- Nairobi-Kenya

	Development Goals	
21 – 22 Feb 2013	IFAD fruit project inception workshop	JKUIAT-Thika
03-07 Sep 2012	Science Forum 2012	ICRAF- Headquarters Nairobi-Kenya
25 – 29 June 2012	IUFRO-FORNESSA Regional Congress & ITTO/AFF forest policy day- “ Forests and Trees; serving the people of Africa and the World	ICRAF- Headquarters Nairobi-Kenya
10 – 13 April 2012	BEATING FAMINE-sustainable food security through land regeneration in a changing climate	ICRAF- Headquarters Nairobi-Kenya
8 – 11 August 2011	14th NAPRECA symposium and AAMPS Ethnoveterinary Medicine Symposium	ICIPE-Nairobi-Kenya
25 – 29 April 2011	Regional workshop to support the preparation of the state of the World’s forests Genetic Resources in Africa World Agroforestry Centre (WAC-HQ)-ICRAF	ICRAF- Headquarters Nairobi-Kenya
15 <sup>th</sup> March 2010	Charcoal Seminar- World Agroforestry Centre (WAC-HQ)-ICRAF	ICRAF- Headquarters Nairobi-Kenya
6 – 8 August 2010	International Science Conference held at World Agroforestry Centre (WAC-HQ)-ICRAF	ICRAF- Headquarters Nairobi-Kenya
15 – 17 September 2010	International conference on Biodiversity, Land Use and Climate Change towards a National Conservation framework	ICRAF- Headquarters Nairobi-Kenya
14 – 18 August 2009	International Conference on Agroforestry held at United Nations (HQ)	United Nations (HQ) Nairobi - Kenya
25 – 27 May 2011	Implementation Training for ISO 14001:2004- Environmental Management Systems (EMS)	Kenyatta University
6 -10 March 2008	International Science Conference held at World Agroforestry Centre (HQ)-ICRAF	ICRAF- Headquarters Nairobi-Kenya
20 – 22 March 2006	Africa Herbal Antimalarial Meeting held at World Agroforestry Centre (WAC-HQ)-ICRAF	ICRAF- Headquarters Nairobi-Kenya
8 - 12 August 2006	American Society of Pharmacognosy (ASP), International Symposium on Pharmacology	New Jersey, USA
25 – 27 July 2005	AFASSA- Africa, Asia, South America Natural Products Network. Symposium held at International Center for Chemical Sciences	University of Karachi, Karachi-Pakistan
27 – 29 August 2004,	NAPRECA- Natural Product research Network for Eastern and Central Africa. Symposium held at University of Nairobi, Kenya	University of Nairobi
16 – 18 April 2004	Flamingo Lakes in Kenya, WWF workshop.	Kunste Hotel Nakuru-Kenya
20 – 22 August 2003	Environment and Reforestation organized by National Museums of Kenya	Braekenhurst, Limuru, Kenya
8 – 12 April 2002	Kenya-Belgium (VLIR) Conference held in Leopard Beach-South Coast Diani -Mombasa	University of Nairobi

### 3. FUNDED PROJECTS

S/ No	Researcher	Year	Title	Granting Body & partners
1.	Najma Dharani, Katja, Ramni	August 2014 to July 2016	Food trees of Kenya -Vol 1 Fruit Trees and shrub (Currently book at publishing stage)	ICRAF, IFAD funded project (PROJECT COMPLETED)
2.	Najma Dharani and Grace Mwangi	2014 March to July 2015	Evergreen Agriculture Curriculum development for Universities in Eastern and Southern Africa (For undergraduate years 3-4)	ICRAF –East Africa and ANAFE Project
3.	Najma Dharani Abiy Yenesew, Ramni Jamnadass	March 2010 To May 2015	Research on Ethno-veterinary medicinal plants to cure livestock and poultry diseases (Book is published)	World Agroforestry Centre (WAC-HQ); funded by IFAD, EU and World Bank. (Partners: Ministry of Livestock (GoK), University of Nairobi, ICRAF & Kenyatta University)
4.	Najma Dharani and Dennis Garrity	January 2011 to Dec. 2013	Evergreen Agriculture in Eastern & Southern Africa	CAWT-SIDA Project funded to ICRAF East Africa Programme, funded by IFAD, EU, World Bank
5.	Najma Dharani, Rukunga, Abiy and ICRAF Scientists	January 2008 to July 2010	Research on Anti-malarial Trees and Shrubs of East Africa (Book is published)	World Agroforestry Centre (WAC-HQ); funded by IFAD, EU, World Bank; (Partners KEMRI, University of Nairobi, GoK, ICRAF & Kenyatta University)

### 4. PUBLICATIONS (Published Papers)

Author	Yr.	Title	Journal	ISBN/ISSN Reference No.
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
Mutunga Christopher Ndolo, Najma Dharani, Katja Kehlenbeck <sub>3</sub>	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 Park, Kenya.	Bulletin Environmental Contamination Toxicology Springer New York, USA.	Vol, 79: 172 – 177
Najma Dharani <i>et al.</i> ,	2006	Structure and Composition of <i>Acacia xanthophloea</i> 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	SWARA - East	

		National Park, Kenya. CONSERVATION. (Article was published from my PHD WORK)	African Wildlife Society-Kenya	Vol, 29: 42 - 45
<b>(Published Books)</b>				
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) <b>(Currently 3<sup>rd</sup> Edition being Edited, will be printed in October 2018)</b>	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.	Mar h 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

## 5. SUPERVISION OF POSTGRADUATE STUDENTS

Name of student	Thesis title	Status of project (e.g. First year etc)
Godfrey Wabwile Wafula (N50/PUC/2040/12) MSc.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	Proposal developing stage

Hussein Aden (MSc.Student at Pwani University, Dept. of Env. Sci.)	The diversity and abundance of butterfly population at Arabuko Sokoke Forest: A reassessment after 20 years of operation.	Student successfully defended his proposal in September 2016.
Wanyera John Francis, (PhD. 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	Ongoing PhD. Project (At Final stages of Thesis)
Kiptore Dominic Kiprotich N50/CTY/PT/24877/2011 (MSc.Student at KU, Dept. of Env. Sci.)	The effects of horticulture farming on the water and soil quality along river Chepsitotilatil, koibatek district in Baringo county	MSc. Project (Final thesis submitted to Internal and External Examiners)
Tabitha Magero N50/21206/2010 (MSc.Student at KU, Dept. of Env. Sci.)	Determination of pollination deficit in coffee plantation at Kilimambogo, Kenya	MSc. Project (Final thesis submitted to Internal and External Examiners)

#### 6. SUPERVISION OF POSTGRADUATE (MSc.) AND PHD STUDENTS WHO HAVE COMPLETED AND GRADUATED

Name of student	Thesis title	MSc. Students graduated
Mutunga 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	PhD Project (KU) (Student graduated in Dec. 2015)
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	MSc. Project – (University of Nairobi). (student graduated in August 2013)



	communities in Central Kajiado, Kenya	
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)

## 7. ASSIGNED AS AN INTERNAL EXAMINER

Name of student	Thesis title	Year
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 (KU-MSc thesis)	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 (KU-MSc. thesis)	Germination and growth performance of selected provenances of <i>Osyris lanceolata</i> in Kenya.	November 2011
Mr Samuel Jacob Muthuri Kirera (KU-MSc thesis)	Analysis of some physical soil properties on water availability in Ngaciuma-Kinyaritha sub-catchment, Upper Tana Basin, Kenya.	November 2011
Ms Regina Nthambi Maingi (KU-MSc thesis)	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

### 8. ASSIGNED AS AN EXTERNAL EXAMINER

Name of student	Thesis title	Year
Mr. Simon F. Nguru Wandeto (School of Biological Sciences, University of Nairobi)	Developing strategies for restoration of a disturbed site in Kakamega forest using Arbuscular Mycorrhiza Fungi (AMF)	December 2013
Mr. Felix Shikhuyu Abdalla (School of Biological Sciences, University of Nairobi)	Comparative autecology of tree species using leaf and wood traits within nine forest of the Taita Hills	June 2014

### 9. Affiliation to Professional Bodies

S/No	Name of professional body
1.	Africa, Asia, South America Natural Products Network (AFASSA)
2.	American Society of Pharmacognosy (ASP) (member)
3.	World Agroforestry Centre (WAC-HQ)
4	NAPRECA- Natural Product research Network for Eastern and Central Africa (member)

### 10. Affiliation to the National Professional Environmental protection Bodies

S/No	Name of professional body
1.	NATURE KENYA- National Museums of Kenya (connecting nature & people)-Member
2.	Kenya Museum Society (KMS) - Member
3.	FONA –(Friends of Nairobi Arboretum)-Committee member
4	FONAP – (Friends of Nairobi National Park) Member
5.	FoCP - (Friends of City Park) - Committee member